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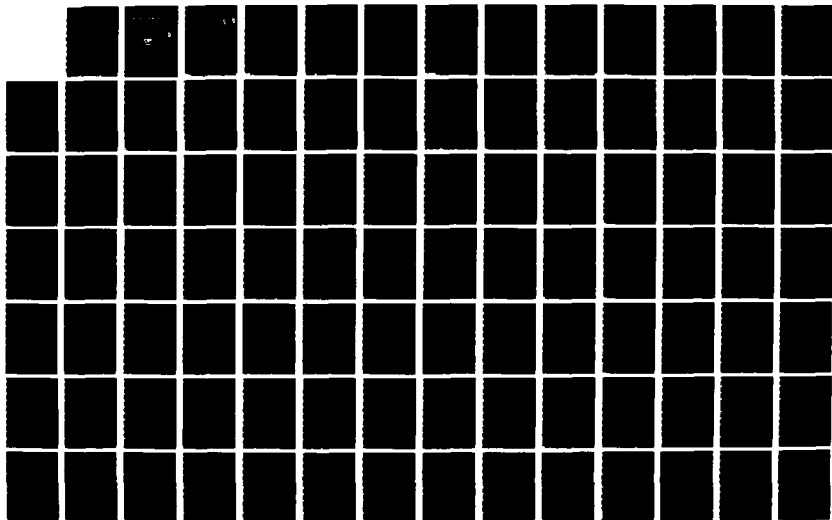
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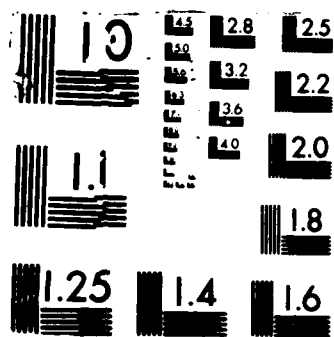
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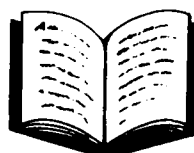
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PREFACE

Oceanography at Oregon State University had its beginning with one man, Dr. Wayne V. Burt, who arrived on Campus in 1954 to join the Department of General Science. Now, in 1987, the College of Oceanography has some 90 faculty, 70 research assistants, 22 clerical and support personnel, and 80 graduate students.

During the years 1955 - 1985, more than 2000 journal papers and 200 Data and Technical Reports were published by faculty, staff, and students. During those years, 549 students earned 616 advanced degrees.

Collected Reprints was published for the years 1956 through 1978. Reference Number and Thesis Listing was published for the years 1955 - 1977. Both have ceased publication.

This Reference 87-1 has been compiled to bring the College of Oceanography publications lists up to date.

Journal Publications (Section I) are grouped by oceanography disciplines: biological, chemical, marine geology, physical, and geophysics. Within each discipline are, first, papers by faculty in alphabetical order by author; and second, papers by research assistants and students. Most citations are peer-review journal papers. A few books and book chapters are included, but abstracts, letters, and book reviews are not.

Data Reports and Selected Reference Numbers (Section II) are in numerical/chronological order. The indexes to this section give author, geographic location, code name, and series. A list of all Reference Numbers 1978 - 1985 is included.

Theses and Dissertations (Section III) are by year of degree, and alphabetically by author within each year. An author index and a list of major professors with their degree students are included.

Availability of publications varies. Many authors are no longer at Oregon State University, and many reports are out of print. The College of Oceanography does not keep extra copies of reports or reprints, although many of the authors do. Theses are not generally available for distribution. Ph.D. dissertations are available through University Microfilms. Therefore, to obtain a publication from these lists, please contact the author. We will help with problems of identification as needed.

Miriam D. Ludwig
Librarian
College of Oceanography

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BIOLOGICAL OCEANOGRAPHY

I. FACULTY

JOHN BAROSS

- Corliss, J. B., J. A. Baross and S. E. Hoffman. 1981. An hypothesis concerning the relationship between submarine hot springs and the origin of life on earth. *Oceanologica Acta* SP:59-69.
- Lawry, E. V., H. M. Howard, J. A. Baross and R. Y. Morita. 1981. The fine structure of Cristispira from the lamelibranch Cryptoma californica Conrad. *Current Microbiology* 6:355-360.
- Peters, S., J. A. Baross and R. Y. Morita. 1982. Partial purification and characterization of hemolysin from a psychrotrophic Kanagawapositive marine vibrio. *Applied and Environmental Microbiology* 43:39-49.
- Baross, J. A., C. N. Dahm, A. K. Ward, M. D. Lilley and J. R. Sedell. 1982. Initial microbiological responses of lakes on Mt. St. Helens following the May 18, 1980 eruption. *Nature* 296:49-52.
- Baross, J. A., M. D. Lilley and L. I. Gordon. 1982. Is the CH₄, H₂ and C venting from submarine hydrothermal systems produced by thermophilic bacteria? *Nature* 298:366-368.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1982. Dissolved hydrogen and methane in Saanich Inlet, British Columbia. *Deep-Sea Research* 29:1471-1484.
- Ward, A. K., J. A. Baross, C. N. Dahm, M. D. Lilley and J. R. Sedell. 1983. Algal composition and activity in several aquatic environments within the blast zone of Mt. St. Helens: 1980-1981. *J. Phycology* 19:238-247.
- Dahm, C. N., J. A. Baross, A. K. Ward, M. D. Lilley and J. R. Sedell. 1983. Initial effects of the eruption of Mt. St. Helens on nitrogen cycle and related chemical processes in Ryan Lake. *Applied and Environmental Microbiology* 45:1633-1645.
- Baross, J. A. and J. W. Deming. 1983. Growth of "black smoker" bacteria at temperatures of at least 250°C. *Nature* 303:423-426.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1983. Reduced gases and bacteria in hydrothermal fluids: The Galapagos Spreading Center and 21°N East Pacific Rise. In *Hydrothermal Processes at Seafloor Spreading Centers*, P. Rona, et al., editors. Plenum Press, New York. pp. 411-449.

GEORGE BOEHLERT

- Boehlert, G. 1981. The role of temperature and photoperiod in the ontogenetic migration of prejuvenile Sebastes diploproa (Pisces:Scorpaenidae). *California Fish and Game* 67:164-175.
- Boehlert, G. 1981. The effects of photoperiod and temperature on laboratory growth of prejuvenile Sebastes diploproa and a comparison with growth in the field. *Fishery Bull.* 79:789-794.
- Bennett, J. T., G. Boehlert and K. K. Turekian. 1982. Confirmation of longevity in Sebastes diploproa (Pisces:Scorpaenidae) using ²¹⁰Pb/²²⁶Ra measurements in otoliths. *Marine Biology* 71:209-215.
- Boehlert, G., W. H. Barss and P. Lamberson. 1982. Fecundity of the widow rockfish, Sebastes entomelas, off the coast of Oregon. *Fishery Bull.* 80:881-884.
- Boehlert, G. and M. M. Yoklavich. 1983. Effects of temperature, ration, and fish size on growth of juvenile black rockfish, Sebastes melanops. *Environmental Biology of Fishes* 8:17-28.

- Ryer, C. H. and G. Boehlert. 1983. Feeding chronology, daily ration, and the effects of temperature upon gastric evacuation in the pipefish, Sungnathus fuscus. Environmental Biology of Fishes 9:301-306.
- Boehlert, G. and M. M. Yoklavich. 1984. Carbon assimilation as a function of ingestion rate in larval Pacific herring, Culpea Harengus Pallasii Valenciennes. J. Experimental Marine Biology and Ecology 79:251-262.
- Boehlert, G. and M. M. Yoklavich. 1984. Reproduction, embryonic energetics and the maternal-fetal relationship in the viviparous genus Sebastes (Pisces: Scorpaenida). Biological Bull. 167:354-370.
- Boehlert, G. and M. M. Yoklavich. 1984. Variability in age estimates in Sebastes as a function of methodology, different readers, and different laboratories. California Fish and Game 70:210-224.
- Boehlert, G. W. 1985. Using objective criteria and multiple regression models for age determination in fishes. Fishery Bull. 83:103-117.
- Boehlert, G. W. and M. M. Yoklavich. 1985. Larval and juvenile growth of sablefish, Anoplopoma Fimbria, as determined from otolith increments. Fishery Bull. 83:475-481.
- Boehlert, G. W., D. M. Gadomski and B. C. Mundy. 1985. Vertical distribution of ichthyoplankton off the Oregon coast in spring and summer months. Fishery Bull. 83:611-621.

ANDREW CAREY, JR.

- Montagna, P. A. and A. G. Carey, Jr. 1979. Distributional notes on Harpacticoida (Crustacea: Copepoda) collected from the Beaufort Sea (Arctic Ocean). Astarte 11:117-122.
- Bilyard, G. R. and A. G. Carey, Jr. 1979. Distribution of western Beaufort Sea polychaetous annelids. Marine Biology 54:329-339.
- Bilyard, G. R. and A. G. Carey, Jr. 1980. Zoogeography of western Beaufort Sea Polychaeta (Annelida). Sarsia 65:19-25.
- Carney, R. S. and A. G. Carey, Jr. 1980. Effectiveness of metering wheels for measurement of the area sampled by beam trawls. Fishery Bull. 78:791-796.
- Carey, A. G., Jr. 1981. Benthic infaunal abundance on two abyssal plains in the northeast Pacific Ocean. Deep-Sea Research 28:467-479.
- Carey, A. G., Jr. and P. A. Montagna. 1982. Arctic sea ice faunal assemblage: First approach to description and source of the underice meiofauna. Marine Ecology Progress Series 8:1-8.
- Carney, R. S. and A. G. Carey, Jr. 1982. The distribution and density of holothuroids (Echinodermata) on Cascadia Basin and Tufts Abyssal Plain. Deep-Sea Research 29:597-607.
- Hogue, E. W. and A. G. Carey, Jr. 1982. Feeding ecology of 0-age flatfishes at a nursery ground on the Oregon coast. Fishery Bull. 80:555-565.
- Kern, J. C. and A. G. Carey, Jr. 1983. The faunal assemblage inhabiting seasonal sea ice in the nearshore Arctic Ocean with emphasis on the copepods. Marine Ecology Progress Series 10:159-167.
- Carey, A. G., Jr., P. H. Scott and K. R. Walters. 1984. Distributional ecology of shallow southwestern Beaufort Sea (Arctic Ocean) bivalve Mollusca. Marine Ecology Progress Series 17:125-134.
- Carey, A. G., Jr. 1985. Marine ice fauna: Arctic. In: Horner, R. A. (ed.). Sea Ice Biota, pp.173-190. CRC Press, Boca Raton, FL.

TIMOTHY J. COWLES

- Nelson, D. M., H. W. Ducklow et al, including T. J. Cowles. 1985. Distribution and composition of biogenic particulate matter in a Gulf Stream warm-core ring. Deep-Sea Research 32:1347-1369.

BRUCE FREY

- Frey, B. E. and L. F. Small. 1979. Recycling of metabolized iron by the marine dinoflagellate Amphidinium carteri. J. Phycology 15:405-409.
- Frey, B. E. and L. F. Small. 1980. Effects of micro-nutrients and major nutrients on the growth of natural phytoplankton populations. J. Plankton Research 2:1-22.
- Frey, B. E., G. Riedel, A. E. Bass, and L. F. Small. 1983. Sensitivity of estuarine phytoplankton to hexavalent chromium. Estuarine, Coastal and Shelf Science 17:181-187.
- Frey, B. E., R. Lara and L. F. Small. 1983. Reduced rates of primary production in the Columbia River Estuary following the May 18, 1980 eruption of Mt. Saint Helens. Estuarine, Coastal and Shelf Science 17:213-218.
- Bristow, M. P. F., D. H. Bundy et al, including B. E. Frey. 1985. Airborne laser fluorosensor survey of the Columbia and Snake rivers: simultaneous measurements of chlorophyll, dissolved organics and optical attenuation. International J. Remote Sensing 6:1707-1734.

JONATHAN H. GARBER

- Garber, J. H. 1984. ^{15}N tracer study of the short-term fate of particulate organic nitrogen at the surface of coastal marine sediments. Marine Ecology Progress Series 16:89-104.
- Garber, J. H. 1984. Laboratory study of nitrogen and phosphorus remineralization during the decomposition of coastal plankton and seston. Estuarine, Coastal and Shelf Science 18:685-702.

JEFFERSON J. GONOR

- Gonor, J. J. 1979. Monoplacophora. In Reproduction of Marine Invertebrates, Volume 5, A. C. Giese and J. S. Pearse, editors. Academic Press, New York. pp. 87-93.
- Elvin, D. W. and J. J. Gonor. 1979. The thermal regime of an intertidal Mytilus californianus Conrad population on the central Oregon coast. J. Experimental Marine Biology and Ecology 39:265-279.
- Batchelder, H. P. and J. J. Gonor. 1981. Population characteristics of the intertidal green sea anemone, Anthopleura xanthogrammica on the Oregon coast. Estuarine, Coastal and Shelf Science 13:235-245.
- Beasley, T. M., H. V. Lorz and J. J. Gonor. 1982. Biokinetic behavior of technetium in the red abalone Haliotis rufescens: A reassessment. Health Physics 43:501-507.
- Beasley, T. M., J. J. Gonor and H. V. Lorz. 1982. Technetium: Uptake, organ distribution and loss in the mussel, Mytilus californianus (Conrad) and the oyster, Crassostrea gigas (Thunberg). Marine Environmental Research 7:103-116.

Johnson, G. E. and J. J. Gonor. 1982. The tidal exchange of Callinassa californiensis (Crustacea: Decapoda) larvae between the ocean and the Salmon River estuary, Oregon. Estuarine, Coastal and Shelf Science 14:501-516.

DANIL R. HANCOCK

Breed-Willeke, G. M. and D. R. Hancock. 1980. Growth and reproduction of subtidal and intertidal populations of the gaper clam, Tresus Capax (Gould) from Yaquina Bay, Oregon. Proceedings of the National Shellfisheries Association, vol. 70:1-13.

Fauchald, K. and D. R. Hancock. 1981. Deep-water polychaetes from a transect off central Oregon. Monographs of the Allan Hancock Foundation No. 11.

ROBERT L. HOLTON

Holton, R. L. and W. A. Laroche. 1979. Occurrence of 0-age English Sole, Parophrys vetulus, in the ocean off Oregon: An open coast nursery area? Northwest Science 53:94-96.

Riedel, G., S. L. Wilson and R. L. Holton. 1984. Trace metals in the Columbia River Estuary following the 18 May 1980 eruption of Mount St. Helens. Pacific Science 38:340-349.

KATHERINE JEFFERTS

Jefferts, K. 1984. Distribution and abundance of the early life stages of squid, primarily Gonatidae (cephalopoda, Oegopsida) in the northern North Pacific, Part 1 and Part 2. Bulletin of the National Science Museum, Tokyo, Series A (Zoology) Pt. 1, 10(3):91-106; Pt. 2., 10(4):165-193.

BRUCE MATE

Mate, B. R., J. Harvey, R. Maiefski and L. Hobbs. 1983. A new radio tag for large whales. J. Wildlife Management 47:869-872.

Brown, R. F. and B. R. Mate. 1983. Abundance, movements and feeding habits of harbor seals, Phoca vitulina, at Netarts and Tillamook Bays, Oregon. Fishery Bull. 81:291-301.

Harvey, J. T., R. F. Brown and B. R. Mate. 1983. Two sightings following release of rehabilitated harbor seals. The Murrelet 64:18.

Roffe, T. J. and B. R. Mate. 1984. Abundances and feeding habits of pinnipeds in the Rogue River, Oregon. J. Wildlife Management 48:1262-1274.

Mate, B. R. and J. T. Harvey. 1984. Ocean movements of radio-tagged gray whales. In: The Gray Whale. M. S. Jones, S. F. Swartz and S. Leatherwood (eds.), Academic Press. pp.577-589.

Harvey, J. T. and B. R. Mate. 1984. Dive characteristics and movements of radio-tagged gray whales in San Ignacio Lagoon, Baja California Sur, Mexico. In: The Gray Whale. M. S. Jones, S. F. Swartz and S. Leatherwood (eds.), Academic Press. pp.561-575.

CHARLES B. MILLER

- Peterson, W. T., C. B. Miller and A. Hutchinson. 1979. Zonation and maintenance of copepod populations in the Oregon upwelling zone. *Deep-Sea Research* 26:467-494.
- Miller, C. B. 1979. Comments from a nominate referee on an exchange of notes. *Limnology and Oceanography* 24:785-787.
- Miller, C. B., D. M. Nelson, R. R. L. Guillard and B. L. Woodward. 1980. Effects of media with low silicic acid concentrations on tooth formation in Acartia tonsa data (Copepoda, Calanoida). *Biological Bull.* 159:349-363.
- McGowan, J. A. and C. B. Miller. 1980. Larval fish and zooplankton community structure. *CalCOFI Reports* 21:29-36.
- Miller, C. B. and D. C. Judkins. 1981. Design of pumping systems for sampling zooplankton with descriptions of two high-capacity samplers for coastal studies. *Biological Oceanography* 1:29-56.
- Hogue, E. W. and C. B. Miller. 1981. Effects of sediment microtopography on small-scale spatial distributions of meiobenthic nematodes. *J. Experimental Marine Biology and Ecology* 53:181-191.
- Terazaki, M. and C. B. Miller. 1982. Reproduction of meso- and bathypelagic chaetognaths in the genus Eukrohnia. *Marine Biology* 71:193-196.
- Miller, C. B. 1983. The zooplankton of estuaries. *In: Estuaries and Enclosed Seas, Encyclopedia of World Ecosystems*, B. Ketchum, editor. Elsevier, Amsterdam. pp. 103-149.
- Rothlisberg, P. C. and C. B. Miller. 1983. Factors affecting the distribution, abundance, and survival of Pandalus jordani (Decapoda, Pandalidae) larvae off the Oregon coast. *Fishery Bull.* 81:455-472.
- Miller, C. B., B. W. Frost, H. P. Batchelder, M. Clemons and R. E. Conway. 1984. Life histories of large, grazing copepods in a subarctic ocean gyre: Neocalanus plumchrus, Neocalanus cristatus, and Eucalanus bungii in the Northeast Pacific. *Progress in Oceanography* 13:201-243.
- Miller, C. B. and M. J. Clemons. 1984. Blooms of large diatoms in the oceanic subarctic Pacific. *Deep-Sea Research* 31:85-95.
- Miller, C. B., M. E. Huntley and E. R. Brooks. 1984. Post-collection molting rates of planktonic, marine copepods: Measurement, applications, problems. *Limnology and Oceanography* 29:1274-1289.
- Brodeur, R. D., D. M. Gadomski, W. G. Pearcy, H. P. Batchelder and C. B. Miller. 1985. Abundance and distribution of ichthyoplankton in the upwelling zone off Oregon during anomalous El Nino conditions. *Estuarine, Coastal and Shelf Science* 21:365-378.

RICHARD MORITA

- Geesey, G. G. and R. Y. Morita. 1979. Capture of arginine at low concentrations by a marine psychrophilic bacterium. *Applied and Environmental Microbiology* 38:1092-1097.
- Hayasaka, S. S. and R. Y. Morita. 1979. Na^+ , K^+ , and non-specific solute requirements for induction and function of galactose active transport in an Antarctic psychrophilic marine bacterium. *Applied and Environmental Microbiology* 37:1166-1172.
- Morita, R. Y. 1979. The role of microbes in the bioenergetics of the deep-sea. *Proceedings Centenary Symposium of the Kristineberg Marine Biological Station. Sarsia* 64:9-12.

- Torrella, F. and R. Y. Morita. 1979. Evidence by electron micrographs for a high incidence of bacteriophage particles in the waters of Yaquina Bay, Oregon: Ecological and taxonomical implications. *Applied and Environmental Microbiology* 37:774-778.
- Morita, R. Y. 1980. Microbial life in the deep sea. *Canadian J. Microbiology* 26:1375-1385.
- Morita, R. Y. 1980. Biological limits of temperature and pressure. *Origins of Life* 10:215-222.
- Morita, R. Y. 1980. Calcite precipitation by marine bacteria. *Geomicrobiology Journal* 2:63-82.
- Geesey, G. G. and R. Y. Morita. 1981 Relationship of cell envelope stability to substrate capture in a marine psychrophilic bacterium. *Applied and Environmental Microbiology* 42:533-540.
- Griffiths, R. P., B. A. Caldwell, W. A. Broich and R. Y. Morita. 1981. Long-term effects of crude oil on uptake and respiration of glucose and glutamate in Arctic and Sub-Arctic marine sediments. *Applied and Environmental Microbiology* 42:792-801.
- Griffiths, R. P., T. M. McNamara, B. A. Caldwell and R. Y. Morita. 1981. Field observations on the acute effect of crude oil on glucose and glutamate uptake in samples collected from Arctic and Sub-Arctic waters. *Applied and Environmental Microbiology* 41:1400-1406.
- Griffiths, R. P., T. M. McNamara, B. A. Caldwell and R. Y. Morita. 1981. A field study on the acute effects of the dispersant Corexit 9527 on glucose uptake by marine microorganisms. *Marine Environmental Research* 5:83-91.
- Griffiths, R. P., T. M. McNamara, S. E. Stevens and R. Y. Morita. 1981. Relative microbial activity and mineralization associated with water masses in the Lower Cook Inlet, Alaska. *J. Oceanographical Society of Japan* 37:227-233.
- Haines, J. R., R. M. Atlas, R. P. Griffiths and R. Y. Morita. 1981. Denitrification and nitrogen fixation in Alaskan Continental Shelf sediments. *Applied and Environmental Microbiology* 41:412-421.
- Lawry, E. V., H. M. Howard, J. A. Baross and R. Y. Morita. 1981. The fine structure of Cristispira from the lamellibranch Cryptomya californica Conrad. *Current Microbiology* 6:355-360.
- Morita, R. Y., R. Iturriaga and V. A. Gallardo. 1981. Thioploca: Methylophile and significance in the food chain. *Kieler Meeresforschungen, Sonderheft* 5:384-389.
- Torrella, F. and R. Y. Morita. 1981. Microcultural study of bacterial size, changes and microcolony and ultramicrocolony formation by heterotrophic bacteria in seawater. *Applied and Environmental Microbiology* 41:518-527.
- Griffiths, R. P., B. A. Caldwell, W. A. Broich and R. Y. Morita. 1982. Long-term effects of crude oil on microbial processes in subarctic sediments: Studies on sediments amended with organic nutrients. *Marine Pollution Bulletin* 13:273-278.
- Griffiths, R. P., B. A. Caldwell, J. D. Cline, W. A. Broich and R. Y. Morita. 1982. Field observations of methane concentrations and oxidation rates in southeastern Bering Sea. *Applied and Environmental Microbiology* 44:435-446.
- Griffiths, R. P., B. A. Caldwell and R. Y. Morita. 1982. Seasonal changes in microbial heterotrophic activity in subarctic marine waters as related to phytoplankton primary production. *Marine Biology* 71:121-127.
- Griffiths, R. P., B. A. Caldwell, W. A. Broich and R. Y. Morita. 1982. The long-term effects of crude oil on microbial processes in subarctic marine sediments. *Estuarine, Coastal and Shelf Science* 15:183-198.

- Morita, R. Y. 1982. Starvation-survival of heterotrophs in the marine environment. *Advances in Microbial Ecology* 6:171-198.
- Peters, S., J. A. Baross and R. Y. Morita. 1982. Partial purification and characterization of hemolysin from a psychrotrophic Kanagawa positive marine vibrio. *Applied and Environmental Microbiology* 43:39-49.
- Reichardt, W. and R. Y. Morita. 1982. Temperature characteristic of psychrotrophic and psychrophilic bacteria. *J. General Microbiology* 128:565-568.
- Reichardt, W. and R. Y. Morita. 1982. Survival stages of a psychrotrophic Cytophaga johnsonae strain. *Canadian J. Microbiology* 28:841-850.
- Reichardt, W. and R. Y. Morita. 1982. Influence of temperature adaptation on glucose metabolism in a psychrotrophic strain of Cytophaga johnsonae. *Applied and Environmental Microbiology* 44:1282-1288.
- Amy, P. S., C. Pauling and R. Y. Morita. 1983. Starvation-survival processes of a marine Vibrio. *Applied and Environmental Microbiology* 45:1041-1048.
- Amy, P. S. and R. Y. Morita. 1983. Starvation-survival patterns of sixteen freshly isolated open-ocean bacteria. *Applied and Environmental Microbiology* 45:1109-1115.
- Amy, P. S., C. Pauling and R. Y. Morita. 1983. Recovery from nutrient starvation by a marine Vibrio sp. *Applied and Environmental Microbiology* 45:1685-1690.
- Amy, P. S. and R. Y. Morita. 1983. Protein patterns of growing and starved cells of a marine Vibro sp. *Applied and Environmental Microbiology* 45:1748-1752.
- Atlas, R. M., M. I. Venkatesan, R. R. Kaplan, R. A. Feeley, R. P. Griffiths and R. Y. Morita. 1983. Distribution of hydrocarbons and microbial populations related to sedimentation processes in Cook Inlet and Norton Sound, Alaska. *Arctic* 36:251-261.
- Baker, J. H. and R. Y. Morita. 1983. A note on the effects of crude oil on microbial activities in a stream sediment. *Environmental Pollution (Series A)* 31:149-157.
- Baker, J. H., R. Y. Morita and N. H. Anderson. 1983. Bacterial activity associated with the decomposition of woody substrates in a stream sediment. *Applied and Environmental Microbiology* 45:516-521.
- Griffiths, R. P., B. A. Caldwell, W. A. Broich and R. Y. Morita. 1983. Microbial processes relating to carbon cycling in southeastern Bering Sea sediments. *Marine Ecology Progress Series* 10:265-275.
- Jones, R. D. and R. Y. Morita. 1983. Methane oxidation by Nitrosococcus oceanus and Nitrosomonas europaea. *Applied and Environmental Microbiology* 45:401-410.
- Jones, R. D. and R. Y. Morita. 1983. Carbon monoxide oxidation by nitrifying bacteria. *Canadian J. Microbiology* 45:1545-1551.
- Kurath, G. and R. Y. Morita. 1983. Starvation-survival physiological studies of a marine Pseudomonas sp. *Applied and Environmental Microbiology* 45:1206-1211.
- Griffiths, R. P., B. A. Caldwell and R. Y. Morita. 1984. Observations on microbial percent respiration in Arctic and Subarctic marine waters and sediments. *Microbial Ecology* 10:151-164.
- Jones, R. D. and R. Y. Morita. 1984. Effects of various parameters on carbon monoxide oxidation by ammonium oxidizers. *Canadian J. Microbiology* 30:894-899.
- Jones, R. D. and R. Y. Morita. 1984. Effect of several nitrification inhibitors on carbon monoxide and methane oxidation by ammonium oxidizers. *Canadian J. Microbiology* 30:1276-1279.

- Jones, R. D., R. Y. Morita and R. P. Griffiths. 1984. Method for estimating in situ chemolithotrophic ammonium oxidation using carbon monoxide oxidation. Marine Ecology Progress Series 17:259-269.
- Morita, R. Y. 1984. Feast or famine in the deep sea. Developments in Industrial Microbiology 25:5-16.
- Jones, R. D. and R. Y. Morita. 1985. Low-temperature growth and whole-cell kinetics of a marine ammonium oxidizer. Marine Ecology Progress Series 21:239-243.
- Jones, R. D. and R. Y. Morita. 1985. Survival of a marine ammonium oxidizer under energy-source deprivation. Marine Ecology Progress Series 26:175-179.

DAVID M. NELSON

- Miller, C. B., D. M. Nelson, R. R. L. Guillard and B. L. Woodward. 1980. Effects of media with low silicic acid concentrations on tooth formation in Acartia tonsa (Copepoda, Calanoida). Biological Bull. 159:349-363.
- Fisher, N. S., G. J. Jones and D. M. Nelson. 1981. Effects of copper and zinc on growth, morphology and metabolism of Asterionella japonica (Cleve). J. Experimental Marine Biology and Ecology 51:37-56.
- Nelson, D. M., J. J. Goering and D. W. Boisseau. 1981. Consumption and regeneration of silicic acid in three coastal upwelling systems. In: Coastal Upwelling, F. A. Richards, editor. American Geophysical Union, Washington, D.C. p. 242-256.
- Nelson, D. M. and L. I. Gordon. 1982. Production and pelagic dissolution of biogenic silica in the Southern Ocean. Geochimica et Cosmochimica Acta 46:491-501.
- Millan-Nunez, R., S. Alvarez-Borrego and D. M. Nelson. 1982. Effects of physical phenomena on the distribution of nutrients and phytoplankton productivity in a coastal lagoon. Estuarine, Coastal and Shelf Science 15:317-335.
- D'Elia, C. F., D. M. Nelson and W. R. Boynton. 1983. Chesapeake Bay nutrient and plankton dynamics III. The annual cycle of dissolved silicon. Geochimica et Cosmochimica Acta 47:1945-1955.
- Nelson, D. M., G. F. Riedel, R. Millan-Nunez and J. R. Lara-Lara. 1984. Silicon uptake by algae with no known Si requirement. I. True cellular uptake and pH-induced precipitation by Phaeodactylum tricornutum (Bacillariophyceae) and Platymonas sp. (Prasinophyceae) J. Phycology 20:141-147.
- Jennings, J. C., L. I. Gordon and D. M. Nelson. 1984. Nutrient depletion indicates high primary productivity in the Weddell Sea. Nature 309:51-54.
- Riedel, G. H. and D. M. Nelson. 1985. Silicon uptake by algae with no known Si requirement. II. Strong pH dependence of uptake kinetic parameters in Phaeodactylum Tricornutum (Bacillariophyceae). J. Phycology 21:168-171.
- Nelson, D. M. et al. 1985. Distribution and composition of biogenic particulate matter in a Gulf Stream warm-core ring. Deep-Sea Research 32:1347-1369.
- Smith, W. O. and D. M. Nelson. 1985. Phytoplankton bloom produced by a receding ice edge in the Ross Sea: Spatial coherence with the density field. Science 227:163-166.

WILLIAM PEARCY

- Pearcy, W. G., H. V. Lorz and W. Peterson. 1979. Comparison of the feeding habits of migratory and non-migratory Stenobrachius leucopsarus (Myctophidae). Marine Biology 51:1-8.
- Pearcy, W. G., T. Nemoto and M. Okiyama. 1979. Mesopelagic fishes of the Bering Sea and adjacent northern North Pacific Ocean. J. Oceanographical Soc. of Japan 35:127-137.
- Pearcy, W. G., C. C. E. Hopkins, S. Gronvik and R. A. Evans. 1979. Feeding habits of cod, capelin, and herring in Balsfjorden, northern Norway, July-August 1978: the importance of euphausiids. Sarsia 64:269-277.
- Willis, J. M. and W. G. Percy. 1980. Spatial and temporal variations in the population size structure of three lanternfishes (Myctophidae) off Oregon, USA. Marine Biology 57:181-191.
- Pearcy, W. G. 1980. A large, opening-closing midwater trawl for sampling oceanic nekton, and comparison of catches with an Isaacs-Kidd midwater trawl. Fishery Bull. 78:529-534.
- Krygier, E. E. and W. G. Percy. 1981. Vertical distribution and biology of pelagic decapod crustaceans off Oregon. J. Crustacean Biology 1:70-95.
- Gabriel, W. L. and W. G. Percy. 1981. Feeding selectivity of Dover Sole, Microstomus pacificus, off Oregon. Fishery Bull. 79:749-763.
- DeVries, T. J. and W. G. Percy. 1982. Fish debris in sediments of the upwelling zone off central Peru: a late Quaternary record. Deep-Sea Research 29:87-109.
- Stein, D. L. and W. G. Percy. 1982. Aspects of reproduction, early life history, and biology of macrourid fishes off Oregon, U.S.A. Deep-Sea Research 29:1313-1329.
- Pearcy, W. G., D. L. Stein and R. S. Carney. 1982. The deep-sea benthic fish fauna of the northeastern Pacific Ocean on Cascadia and Tufts Abyssal Plains and adjoining continental slopes. Biological Oceanography 1:375-428.
- Peterson, W. T., R. D. Brodeur and W. G. Percy. 1982. Food habits of juvenile salmon in the Oregon coastal zone, June 1979. Fishery Bull. 80:841-851.
- Willis, J. M. and W. G. Percy. 1982. Vertical distribution and migration of fishes from the lower mesopelagic zone off Oregon. Marine Biology 70:87-98.
- Lorz, H. V., W. G. Percy and M. Fraidenburg. 1983. Notes on the feeding habits of the yellowtail rockfish Sebastes flavidus, off Washington and in Queen Charlotte Sound. California Fish and Game 69:33-38.
- Pearcy, W. G. and K. Masuda. 1983. Tagged steelhead trout (Salmo gairdneri) collected North Pacific by the Oshoro Maru, 1980-1981. Bull. Faculty of Fisheries, Hokkaido University, Japan, 33:249-254.
- Pearcy, W. G. and M. Stuiver. 1983. Vertical transport of carbon-14 into deep-sea food webs. Deep-Sea Research 30:427-440.
- Fisher, J. P. and W. G. Percy. 1983. Reproduction, growth, feeding and distribution of the mesopelagic fish Tactostoma macropus. Marine Biology 74:257-267.
- Pearcy, W. G., C. F. Greenlaw and T. Pommeranz. 1983. Assessment of euphausiids with five nets and a 120 kHz echosounder in fjords of northern Norway. Biological Oceanography 2:151-177.
- Pearcy, W. G. 1983. Quantitative assessment of the vertical distribution of micronektonic fishes with opening-closing midwater trawls. Biological Oceanography 2:289-310.
- Pearcy, W. G. 1983. SCOR Symposium on Methods of Sampling Micronekton (Guest Editor). Biological Oceanography 2(2/4):105-456.

- Brodeur, R. D. and W. G. Pearcy. 1984. Food habits and dietary overlap of some shelf rockfishes (Genus Sebastes) from the northeastern Pacific Ocean. Fishery Bull. 82:269-293.
- Pearcy, W. G., T. Nishiyama, T. Fujii and K. Masuda. 1984. Diel variations in the feeding habits of Pacific salmon caught in gill nets during a 24-hour period in the Gulf of Alaska. Fishery Bull. 82:391-399.
- Brodeur, R. D., D. M. Gadomski, W. G. Pearcy, H. P. Batchelder and C. B. Miller. 1985. Abundance and distribution of ichthyoplankton in the upwelling zone off Oregon during anomalous El Nino conditions. Estuarine, Coastal and Shelf Science 21:365-378.
- Greenlaw, C. F. and W. G. Pearcy. 1985. Acoustical patchiness of mesopelagic micronekton. J. Marine Research 43:163-178.

SALLY L. RICHARDSON

- Richardson, S. L., J. R. Dunn and N. A. Naplin. 1980. Eggs and larvae of butter sole, Isopsetta isolepis (pleuronectidae), off Oregon and Washington. Fishery Bull. 401-417.
- Lyczkowski Laroche, J. and S. L. Richardson. 1980. Reproduction of northern anchovy, Engraulis Mordax, off Oregon and Washington. Fishery Bull. 78:603-618.
- Richardson, S. L. 1981. Spawning biomass and early life of northern anchovy, Engraulis Mordax, in the northern subpopulation off Oregon and Washington. Fishery Bull. 78:855-876.

JOSEPH SIEBENALLER

- Siebenaller, J. F., G. N. Somero and R. L. Haedrich. 1982. Biochemical characteristics of macrourid fishes differing in their depths of distribution. Biological Bull. 163:240-249.
- Somero, G. N., J. F. Siebenaller and P. W. Hochachka. 1983. Biochemical and physiological adaptations of deep-sea animals. In The Sea, Vol. 8, G. Rowe, editor. Wiley-Interscience, New York. pp. 261-330.
- Siebenaller, J. F., 1983. The pH-dependence of the effects of hydrostatic pressure on the M₄-lactate dehydrogenase homologs of scorpaenid fishes. Marine Biology Letters 4:233-243.
- Siebenaller, J. F., T. F. Orr, B. B. Olwin and S. S. Taylor. 1983. Comparison of the D-lactate stereospecific dehydrogenase of Limulus polyphemus with the active site regions of L-lactate dehydrogenases. Biochimica et Biophysica Acta 749:153-162.
- Siebenaller, J. F. and P. H. Yancey. 1984. The protein composition of white skeletal muscle from mesopelagic fishes having different water and protein contents. Marine Biology 78:129-137.
- Siebenaller, J. F. 1984. Pressure-adaptive differences in NAD-dependent dehydrogenases of congeneric marine fishes living at different depths. J. Comparative Physiology B 154:443-448.
- Siebenaller, J. F. 1984. Structural comparison of lactate dehydrogenase homologs differing in sensitivity to hydrostatic pressure. Biochimica et Biophysica Acta 786:161-169.
- Siebenaller, J. F. 1984. Analysis of the biochemical consequences of ontogenetic vertical migration in a deep-living teleost fish. Physiological Zoology 54:598-608.

LAWRENCE SMALL

- Donaghay, P. L. and L. F. Small. 1979. Long-term food modification by Acartia clausi: a preliminary view. *Marine Biology* 52:129-136.
- Donaghay, P. L. and L. F. Small. 1979. Food selection capabilities of the estuarine copepod Acartia clausi. *Marine Biology* 52:137-146.
- Small, L. F., S. W. Fowler and M. Y. Unlu. 1979. Sinking rates of natural copepod fecal pellets. *Marine Biology* 51:233-241.
- Frey, B. E. and L. F. Small. 1979. Recycling of metabolized iron by the marine dinoflagellate Amphidinium carterae. *J. Phycology* 15:405-409.
- Frey, B. E. and L. F. Small. 1980. Effects of micro-nutrients and major nutrients on natural phytoplankton populations. *J. Plankton Research* 2:1-22.
- Lara-Lara, J. R., S. Alvarez-Borrego and L. F. Small. 1980. Variability and tidal exchange of ecological properties in a coastal lagoon. *Estuarine and Coastal Marine Science* 11:613-637.
- Komar, P. D., A. D. Morse, L. F. Small and S. W. Fowler. 1981. An analysis of sinking rates of natural copepod and euphausiid fecal pellets. *Limnology and Oceanography* 26:172-180.
- Small, L. F. and D. W. Menzies. 1981. Patterns of primary productivity and biomass in a coastal upwelling region. *Deep-Sea Research* 28:123-149.
- Frey, B. E., R. Lara-Lara and L. F. Small. 1983. Reduced rates of primary production in the Columbia River estuary following the eruption of Mt. Saint Helens on 18 May 1980. *Estuarine, Coastal and Shelf Science* 17:213-218.
- Small, L. F., S. W. Fowler, S. A. Moore and J. LaRosa. 1983. Dissolved and fecal pellet carbon and nitrogen release by zooplankton in tropical waters. *Deep-Sea Research* 30:1199-1220.
- Frey, B. E., G. F. Riedel, A. E. Bass and L. F. Small. 1983. Sensitivity of estuarine phytoplankton to hexavalent chromium. *Estuarine, Coastal and Shelf Science* 17:181-187.
- Andrews, C. C., D. M. Karl, L. F. Small and S. W. Fowler. 1983. Metabolic activity and bioluminescence of oceanic faecal pellets and sediment trap particles. *Nature* 307:539-541.
- Bristow, M. P. F., D. H. Bundy, C. M. Edmonds, P. E. Ponto, B. E. Frey and L. F. Small. 1985. Airborne laser fluorosensor survey of the Columbia and Snake rivers: simultaneous measurements of chlorophyll, dissolved organics and optical attenuation. *International J. Remote Sensing* 6:1707-1734.

DAVID L. STEIN

- Stein, D. L. 1979. The genus Pseudos a junior synonym of Paraliparis, with a redescription of Paraliparis micrurus (Barnard) (Pisces: Liparidae). *Matsya* 4:5-10.
- Stein, D. L. and A. E. Peden. 1979. First record of Paraliparis paucidens Stein (Pisces: Liparidae) from British Columbia waters. *Syesis* 12:181.
- Howe, K. M., D. L. Stein and C. E. Bond. 1980. First records off Oregon of the pelagic fishes Paralepis atlantica, Gonostoma atlanticum, and Aphanopus carbo, with notes on the anatomy of A. carbo. *Fishery Bull.* 77:700-703.
- Matarese, A. C. and D. L. Stein. 1980. Additional records of the sculpin Psychrolutes phrictus in the eastern Bering Sea and off Oregon. *Fishery Bull.* 78:169-171.

- Stein, D. L. 1980. Aspects of reproduction of liparid fishes from the continental slope and abyssal plain off Oregon, with notes on growth. *Copeia* 1980 (4):687-699.
- Stein, D. L. 1980. Description and occurrence of macrourid larvae and juveniles in the northeast Pacific Ocean off Oregon, USA. *Deep-Sea Research* 27:889-900.
- Pearcy, W. G., D. L. Stein and R. S. Carney. 1982. The deep-sea benthic fish fauna of the northeastern Pacific Ocean on Cascadia and Tufts Abyssal Plains and adjoining continental slopes. *Biological Oceanography* 1:375-428.
- Stein, D. L. and W. G. Percy. 1982. Aspects of reproduction, early life history, and biology of macrourid fishes off Oregon, USA. *Deep-Sea Research* 29:1313-1329.
- Stein, D. L. and J. E. Fitch. 1984. Paraliparis nassarum n. sp. (Pisces, Liparididae) from off Southern California, with descriptions of its otoliths and others from Northeast Pacific liparidids. *Bull. Southern California Academy of Science* 83:76-83.
- Bond, C. E. and D. L. Stein. 1984. Opaeophacus acrogeneius, a new genus and species of Zoarcidae (Pisces:Osteichthyes) from the Bering Sea. *Proceedings of Biological Society of Washington*, 97:522-525.
- Stein, D. L. 1985. Towing large nets by single warp at abyssal depths: methods and biological results. *Deep-Sea Research* 32:183-200.
- Stein, D. L. and C. E. Bond. 1985. Observations on the morphology, ecology, and behaviour of Bathylchnops Exilis Cohen. *J. Fisheries Biology* 27:215-228.

RICHARD C. SWARTZ

- Swartz, R. C., W. A. DeBen, K. A. Sercu and J. O. Lamberson. 1982. Sediment toxicity and the distribution of amphipods in Commencement Bay, Washington, USA. *Marine Pollution Bull.* 13:359-364.
- Swartz, R. C., D. W. Schults, G. R. Ditsworth and W. A. DeBen. 1984. Toxicity of sewage sludge to Rhepoxynius abronius, a marine benthic amphipod. *Archives of Environmental Contamination and Toxicology* 13:207-216.
- Kemp, P. F., F. A. Cole and R. C. Swartz. 1985. Life history and productivity of the phoxocephalid amphipod Renpoxynius abronius (Barnard). *J. Crustacean Biology* 5:449-464.

GARY TAGHON

- Taghon, G. L., A. R. M. Nowell and P. A. Jumars. 1984. Transport and breakdown of fecal pellet: Biological and sedimentological consequences. *Limnology and Oceanography* 29:64-72.
- Taghon, G. L. and P. A. Jumars. 1984. Variable ingestion rate and its role in optimal foraging behavior in marine deposit feeders. *Ecology* 65:549-558.
- Komar, P. D. and G. L. Taghon. 1985. Analyses of the settling velocities of fecal pellets from the subtidal polychaete Amphicteis scaphobranchiata. *J. Marine Research* 43:605-614.

PATRICIA WHEELER

- Wheeler, P. A., P. M. Gilbert and J. J. McCarthy. 1982. Ammonium uptake and incorporation by Chesapeake Bay phytoplankton: short-term uptake kinetics. *Limnology and Oceanography* 27:1113-1128.
- Wheeler, P. A. and J. J. McCarthy. 1982. Methylammonium uptake by Chesapeake Bay phytoplankton: evaluation of the use of the ammonium analogue for field uptake measurements. *Limnology and Oceanography* 27:1129-1140.
- Wheeler, P. A. 1983. Phytoplankton nitrogen metabolism. In *Nitrogen in the Marine Environment*, E. J. Carpenter and D. G. Capone, editors. Academic Press. pp. 309-346.
- Wheeler, P. A., R. J. Olson and S. W. Chisholm. 1983. Effects of photocycles and periodic ammonium supply on three marine phytoplankton species. II. Ammonium uptake and assimilation. *J. Phycolgy* 19:528-533.
- Wheeler, P. A. 1985. Nutrients. In: *Handbook of Phycological Methods: Ecological Field and Methods: Macroalgae*. Edited by M. M. Littler and D. S. Littler. pp.53-64.
- Harlin, M. M. and P. A. Wheeler. 1985. Nutrient uptake. In: *Handbook of Phycological Methods: Ecological Field Methods: Macroalgae*. Edited by M. M. Littler and D. S. Littler. pp.493-508.

II. RESEARCH ASSISTANTS AND STUDENTS

SAUL ALVAREZ-BORREGO

- Small, L. F., J. R. Lara-Lara and S. Alvarez-Borrego. 1980. Variability and tidal exchange of ecological properties in a coastal lagoon. *Estuarine and Coastal Marine Science* 11:613-637
- Millan-Nunez, R., S. Alvarez-Borrego and D. M. Nelson. 1982. Effects of physical phenomena on the distribution of nutrients and phytoplankton productivity in a coastal lagoon. *Estuarine, Coastal and Shelf Science* 15:317-335.

JULIE W. AMBLER

- Ambler, J. W. Species of Munidopsis (Crustacea, Galatheidae) occurring off Oregon and in adjacent waters. *Fishery Bull.* 78:13-34.

HAROLD P. BATCHELDER

- Batchelder, H. P. and J. J. Gonor. 1981. Population characteristics of the intertidal green sea anemone, Anthopleura xanthogrammica on the Oregon coast. *Estuarine, Coastal and Shelf Science* 13:235-245.
- Miller, C. B., B. W. Frost, H. P. Batchelder, M. Clemons and R. E. Conway. 1984. Life histories of large, grazing copepods in a subarctic ocean gyre: Neocalanus plumchrus, Neocalanus cristatus, and Eucalanus bungii in the Northeast Pacific. *Progress in Oceanography* 13:201-243.
- Batchelder, H. P. 1985. Seasonal abundance, vertical distribution, and life history of Metridia pacifica (Copepoda: Calanoida) in the oceanic subarctic Pacific. *Deep-Sea Research* 32:949-964.
- Brodeur, R. D., D. M. Gadomski, W. G. Pearcy, H. P. Batchelder and C. B. Miller. 1985. Abundance and distribution of ichthyoplankton in the upwelling zone off Oregon during anomalous El Nino conditions. *Estuarine, Coastal and Shelf Science* 21:365-378.

GORDON R. BILYARD

- Bilyard, G. R. and A. G. Carey, Jr. 1979. Distributional ecology of the western Beaufort Sea Polychaetous Annelids. *Marine Biology* 54:329-339.
- Bilyard, G. R. and A. G. Carey, Jr. 1980. Zoogeography of western Beaufort Sea polychaeta (Annelida). *Sarsia* 65:19-25.

RICHARD BRODEUR

- Peterson, W. T., R. D. Brodeur and W. G. Pearcy. 1983. Food habits of juvenile salmon in the Oregon coastal zone, June 1979. *Fishery Bull.* 80:841-851.
- Brodeur, R. D. and W. G. Pearcy. 1984. Food habits and dietary overlap of some shelf rockfishes (Genus Sebastes) from the northeastern Pacific Ocean. *Fishery Bull.* 82:269-293.
- Brodeur, R. D., D. M. Gadowski, W. G. Pearcy, H. P. Batchelder and C. B. Miller. 1985. Abundance and distribution of ichthyoplankton in the upwelling zone off Oregon during anomalous El Nino conditions. *Estuarine, Coastal and Shelf Science* 21:365-378.

ROBIN BROWN

- Harvey, J. T., R. F. Brown and B. R. Mate. 1983. Two sightings following release of rehabilitated harbor seals. *The Murrelet* 64:18.
- Brown, R. F. and B. R. Mate. 1983. Abundance, movements and feeding habits of harbor seals, Phoca vitulina, at Netarts and Tillamook Bays, Oregon. *Fishery Bull.* 81:291-301.

MARK A. BRZEZINSKI

- Nelson, D. M., H. W. Ducklow, G. L. Hitchcock, M. A. Brzezinski, et al. 1985. Distribution and composition of biogenic particulate matter in a Gulf Stream warm-core ring. *Deep-Sea Research* 32:1347-1369.
- Brzezinski, M. A. 1985. The Si:C:N ratio of marine diatoms: Interspecific variability and the effect of some environmental variables. *J. Phycology* 21:347-357.

ROBERT S. CARNEY

- Carney, R. S. and A. G. Carey, Jr. 1980. Effectiveness of metering wheels for measurement of the area sampled by beam trawls. *Fishery Bull.* 78:791-796.
- Carney, R. S. and A. G. Carey, Jr. 1982. Distribution and diversity of holothuroids (Echinodermata) on Cascadia Basin and Tufts Abyssal Plain. *Deep-Sea Research* 29:597-607.

BARBARA L. DEXTER

- Dexter, B. L. 1981. Setogenesis and molting in planktonic crustaceans. J. of Plankton Research 3:1-13.

PERCY L. DONAGHAY

- Donaghay, P. L. and L. F. Small. 1979. Long-term food modification by Acartia clausi: a preliminary view. Marine Biology 52:129-136.
- Donaghay, P. L. and L. F. Small. 1979. Food selection capabilities of the estuarine copepod Acartia clausi. Marine Biology 52:137-146.
- DeManche, J. M., H. C. Curl, Jr., D. W. Lundy and P. L. Donaghay. 1979. Rapid response of a marine diatom to changes in external and internal nutrient concentration. Marine Biology 53:323-333.
- Pak, H., J. C. Kitchen, P. Donaghay and J. R. V. Zaneveld. 1981. Some observations on the effect of ozone treatment on suspended particulate matter in seawater. Estuarine, Coastal and Shelf Science 13:327-336.

DAVID W. ELVIN

- Elvin, D. W. and J. J. Gonor. 1979. The thermal regime of an intertidal Mytilus californianus Conrad population on the central Oregon coast. J. Experimental Marine Biology and Ecology 39:265-279.

JOSEPH P. FISHER

- Fisher, J. P. and W. G. Pearcy. 1983. Reproduction, growth, feeding and distribution of the mesopelagic fish Tactostoma macropus. Marine Biology 74:257-267.

WENDY L. GABRIEL

- Gabriel, W. L. and W. G. Pearcy. 1981. Feeding selectivity of Dover Sole, Microstomus pacificus, off Oregon. Fishery Bull. 79:749-763.

DENA GADOMSKI

- Brodeur, R. D., D. M. Gadomski, W. G. Pearcy, H. P. Batchelder and C. B. Miller. 1985. Abundance and distribution of ichthyoplankton in the upwelling zone off Oregon during anomalous El Nino conditions. Estuarine, Coastal and Shelf Science 21:365-378.
- Boehlert, G. W., D. M. Gadomski and B. C. Mundy. 1985. Vertical distribution of ichthyoplankton off the Oregon coast in spring and summer months. Fishery Bull. 83:611-621.

CHARLES F. GREENLAW

- Greenlaw, C. F. 1979. Acoustical estimation of zooplankton populations. Limnology and Oceanography 24:226-242.

JAMES T. HARVEY

- Mate, B. R., J. Harvey, R. Maiefski and L. Hobbs. 1983. A new radio tag for large whales. *J. Wildlife Management* 47:869-872.
- Harvey, J. T., R. F. Brown and B. R. Mate. 1983. Two sightings following release of rehabilitated harbor seals. *The Murrelet* 64:18.
- Harvey, J. T. and B. R. Mate. 1984. Dive characteristics and movements of radio-tagged gray whales in San Ignacio Lagoon, Baja California Sur, Mexico. *In: The Gray Whale*. M. S. Jones, S. F. Swartz and S. Leatherwood (eds.). Academic Press. pp.561-575.
- Mate, B. R. and J. T. Harvey. 1984. Ocean movements of radio-tagged gray whales. *In: The Gray Whales*. M. S. Jones, S. F. Swartz and S. Leatherwood (eds.). Academic Press. pp.577-589.

EVERETT W. HOGUE

- Hogue, E. W. and C. B. Miller. 1981. Effects of sediment microtopography on small-scale spatial distributions of meiobenthic nematodes. *J. Experimental Marine Biology and Ecology* 53:181-191.
- Hogue, E. W. and A. G. Carey, Jr. 1982. Feeding ecology of 0-age flatfishes at a nursery ground on the Oregon coast. *Fishery Bull.* 80:555-565.
- Hogue, E. W. 1982. Sediment disturbance and spatial distributions of shallow water meiobenthic nematodes on the open Oregon coast. *J. Marine Research* 40:551-573.

GARY E. JOHNSON

- Johnson, G. E. and J. J. Gonor. 1982. The tidal exchange of Callinassa californiensis (Crustacea, Decapoda) larvae between the ocean and the Salmon River estuary, Oregon. *Estuarine, Coastal and Shelf Science* 14:501-516.

JOHN KENNETH JOHNSON

- Johnson, J. K. 1979. Effects of temperature and salinity on production and hatching of dormant eggs of Acartia californiensis (Copepoda) in an Oregon estuary. *Fishery Bull.* 77:567-584.

HOWARD R. JONES

- Kravitz, M. J. and H. R. Jones. 1979. Systematics and ecology of benthic phyllodocidae (Annelida: Polychaeta) off the Columbia River, USA. *Bull. Southern California Academy of Sciences* 78:1-19.

JOHN C. KERN

- Kern, J. C. and A. G. Carey, Jr. 1983. The faunal assemblage inhabiting seasonal sea ice in the nearshore Arctic Ocean with emphasis on the copepods. *Marine Ecology Progress Series* 10:159-167.

EARL E. KRYGIER

- Krygier, E. E. and W. G. Pearcy. 1981. Vertical distribution and biology of pelagic decapod crustaceans off Oregon. *J. Crustacean Biology* 1:70-95.
- Krygier, E. E. and C. A. Forss. 1981. A new Acanthephyra (crustacea, decapoda, caridea) from the northeast Pacific Ocean. *J. Crustacean Biology* 1:96-104.

JOSE R. LARA-LARA

- Lara-Lara, J. R., S. Alvarez-Borrego and L. F. Small. 1980. Variability and tidal exchange of ecological properties in a coastal lagoon. *Estuarine and Coastal Marine Science* 11:613-637
- Frey, B. E., J. R. Lara-Lara and L. F. Small. 1983. Reduced rates of primary production in the Columbia River estuary following the eruption of Mt. Saint Helens on 18 May 1980. *Estuarine, Coastal and Shelf Science* 17:213-218.
- Nelson, D. M., G. F. Riedel, R. Millan-Nunez and J. R. Lara-Lara. 1984. Silicon uptake by algae with no known Si requirement. I. True cellular uptake and pH-induced precipitation by Phaeodactylum tricornutum (Bacillariophyceae) and Platymonas sp. (Prasinophyceae) *J. Phycology* 20:141-147.

WAYNE LAROCHE

- Holton, R. L. and W. A. Laroche. 1979. Occurrence of 0-age English Sole, Parophrys vetulus, in the ocean off Oregon: An open coast nursery area? *Northwest Science* 53:94-96.

HARRIET V. LORZ

- Pearcy, W. G., H. V. Lorz and W. Peterson. 1979. Comparison of the feeding habits of migratory and non-migratory Stenobrachius leucopsarus (Myctophidae). *Marine Biology* 51:1-8.
- Beasley, T. M., H. V. Lorz and J. J. Gonor. 1982. Biokinetic behavior of technetium in the red abalone Haliotis rufescens: A reassessment. *Health Physics* 43:501-507.
- Beasley, T. M., J. J. Gonor and H. V. Lorz. 1982. Technetium: Uptake, organ distribution and loss in the mussel, Mytilus californianus (Conrod) and the oyster, Crassostrea gigas (Thunberg). *Marine Environmental Research* 7:103-116.

DAVID W. MENZIES

- Small, L. F. and D. W. Menzies. 1981. Patterns of primary productivity and biomass in a coastal upwelling region. *Deep-Sea Research* 28:123-149.

ROBERTO MILLAN-NUNEZ

- Millan-Nunez, R., S. Alvarez-Borrego and D. M. Nelson. 1982. Effects of physical phenomena on the distribution of nutrients and phytoplankton productivity in a coastal lagoon. *Estuarine, Coastal and Shelf Science* 15:317-335.
- Nelson, D. M., G. F. Riedel, R. Millan-Nunez and J. R. Lara-Lara. 1984. Silicon uptake by algae with no known Si requirement. I. True cellular uptake and pH-induced precipitation by Phaeodactylum tricornutum (Bacillariophyceae) and Platymonas sp. (Prasinophyceae). *J. Phycology* 20:141-147.

PAUL A. MONTAGNA

- Montagna, P. A. and A. G. Carey, Jr. 1979. Distributional notes on Harpacticoida (Crustacea: Copepoda) collected from the Beaufort Sea (Arctic Ocean). *Astarte* 11:117-122.
- Montagna, P. A. 1980. Two new bathyal species of Pseudotachidius (Copepoda: Harpacticoida) from the Beaufort Sea (Alaska, USA). *J. Natural History* 14:567-578.
- Carey, A. G., Jr. and P. A. Montagna. 1982. An arctic sea ice faunal assemblage: First approach to the description and the source of the underice meiofauna. *Marine Ecology-Progress Series* 8:1-8.

STANLEY A. MOORE

- Small, L. F., S. W. Fowler, S. A. Moore and J. LaRosa. 1983. Dissolved and fecal pellet carbon and nitrogen release by zooplankton in tropical waters. *Deep-Sea Research* 30:1199-1220.

BRUCE MUNDY

- Boehlert, G. W., D. M. Gadowski and B. C. Mundy. 1985. Vertical distribution of ichthyoplankton off the Oregon coast in spring and summer months. *Fishery Bull.* 83:611-621.

WILLIAM T. PETERSON

- Peterson, W. T., C. B. Miller and A. Hutchinson. 1979. Zonation and maintenance of copepod populations in the Oregon upwelling zone. *Deep-Sea Research* 26A:467-494.
- Pearcy, W. G., H. V. Lorz and W. Peterson. 1979. Comparison of the feeding habits of migratory and non-migratory Stenobrachius leucopsarus (Myctophidae). *Marine Biology* 51:1-8.
- Peterson, W. T., R. D. Brodeur and W. G. Pearcy. 1983. Food habits of juvenile salmon in the Oregon coastal zone. *Fishery Bull.* 80:841-851.

GERHARDT F. RIEDEL

- Frey, B. E., G. F. Riedel, A. E. Bass and L. F. Small. 1983. Sensitivity of estuarine phytoplankton to hexavalent chromium. *Estuarine, Coastal and Shelf Science* 17:181-187.

- Riedel, G., S. L. Wilson, R. L. Holton. 1984. Trace metals in the Columbia River Estuary following the 18 May 1980 eruption of Mount St. Helens. *Pacific Science* 38:340-349.
- Nelson, D. M., G. F. Riedel, R. Millan-Nunez and J. R. Lara-Lara. 1984. Silicon uptake by algae with no known Si requirement. I. True cellular uptake and pH-induced precipitation by Phaeodactylum tricornutum (Bacillariophyceae) and Platymonas sp. (Prasinophyceae) *J. Phycology* 20:141-147.
- Riedel, G. and D. M. Nelson. 1985. Silicon uptake by algae with no known Si requirement. II. Strong pH dependence of uptake kinetic parameters in Phaeodactylum Tricornutum (Bacillariophyceae). *J. Phycology* 21:347-357.

• THOMAS J. ROFFE

- Roffe, T. J. and B. R. Mate. 1984. Abundances and feeding habits of pinnipeds in the Rogue River, Oregon. *J. Wildlife Management* 48:1262-1274.

ANDREW ROSENBERG

- Rosenberg, A. 1982. Growth of juvenile English sole, Parophrys vetulus, in estuarine and open coastal nursery grounds. *Fishery Bull.* 80:245-252.

PAUL H. SCOTT

- Carey, A. G., Jr., P. H. Scott and K. R. Walters. 1984. Distributional ecology of shallow southwestern Beaufort Sea (Arctic Ocean) bivalve Mollusca. *Marine Ecology Progress Series* 17:125-134.

JONATHAN SHENKER

- Shenker, J. 1983. Distribution, size relationships, and food habits of juvenile king-of-the-salmon, Trachipterus altivelis, caught off the Oregon coast. *Fishery Bull.* 81:161-164.

JONATHAN L. TEMTE

- Temte, J. L. and S. Spielvogel. 1985. Serum progesterone levels and reproductive status of incidentally killed female Dall porpoises. *J. Wildlife Management* 49:51-54.
- Temte, J. L. 1985. Photoperiod and delayed implantation in the northern fur seal (Callorhinus ursinus). *J. Reproductive Fertility* 73:127-131.

• KEITH R. WALTERS

- Carey, A. G., Jr., P. H. Scott and K. R. Walters. 1984. Distributional ecology of shallow southwestern Beaufort Sea (Arctic Ocean) bivalve Mollusca. *Marine Ecology Progress Series* 17:125-134.

J. MARCUS WILLIS

- Willis, J. M. and W. G. Pearcy. 1980. Spatial and temporal variations in the population size structure of three lanternfishes (Myctophidae) off Oregon, USA. *Marine Biology* 57:181-191.
- Willis, J. M. and W. G. Pearcy. 1982. Vertical distribution and migration of fishes from the lower mesopelagic zone off Oregon. *Marine Biology* 70:87-98.
- Willis, J. M. 1984. Mesopelagic fish faunal regions of the Northeast Pacific. *Biological Oceanography* 3:167-185.

STEPHANIE L. WILSON

- Riedel, G., S. L. Wilson, R. L. Holton. 1984. Trace metals in the Columbia River Estuary following the 18 May 1980 eruption of Mount St. Helens. *Pacific Science* 38:340-349.

MARY YOKLAVICH

- Boehlert, G. W. and M. M. Yoklavich. 1984. Carbon assimilation as a function of ingestion rate in larval Pacific herring, Culpea harengus pallasii valenciennes. *J. Experimental Marine Biology and Ecology* 79:251-262.
- Boehlert, G. W. and M. M. Yoklavich. 1984. Reproduction, embryonic energetics, and the maternal-fetal relationship in the viviparous genus Sebastes (Pisces: Scorpaenidae). *Biological Bull.* 167:354-370.
- Boehlert, G. W. and M. M. Yoklavich. 1984. Variability in age estimates in Sebastes as a function of methodology, different readers, and different laboratories. *California Fish and Game* 70:210-224.
- Boehlert, G. W. and M. M. Yoklavich. 1985. Larval and juvenile growth of sablefish, Anoplopoma fimbria, as determined from otolith increments. *Fishery Bull.* 83:475-481.

CHEMICAL OCEANOGRAPHY

I. FACULTY

TOM BEASLEY

- Holm, E., S. Ballestra, R. Fukai and T. M. Beasley. 1980. Particulate plutonium and americium in Mediterranean surface waters. *Oceanologica Acta* 3:157-160.
- Beasley, T. M. and L. A. Ball. 1980. ^{243}Pu , ^{244}Pu in Columbia River sediments. *Nature* 287:624-625.
- Beasley, T. M., L. A. Ball, J. E. Andrews III and J. E. Halverson. 1981. Hanford-derived plutonium in Columbia River sediments. *Science* 214:913-915.
- Carpenter, R. and T. M. Beasley. 1981. Plutonium and americium in anoxic marine sediments: Evidence against remobilization. *Geochimica et Cosmochimica Acta* 45:1917-1930.
- Beasley, T. M., L. A. Ball and B. A. Blakesley. 1981. Plutonium and americium export to the northeast Pacific Ocean by Columbia River run-off. *Estuarine, Coastal and Shelf Science* 13:659-669.
- Guary, J. C., S. W. Fowler and T. M. Beasley. 1982. Routes of plutonium uptake and their relation to biomagnification in starfish. *Marine Pollution Bulletin* 13:99-102.
- Beasley, T. M., J. J. Gonor and H. V. Lorz. 1982. Technetium: Uptake, organ distribution and loss in the mussel, *Mytilus californianus* (Conrad) and the oyster *Crassostrea gigas* (Thunberg). *Marine Environmental Research* 7:103-116.
- Beasley, T. M., H. V. Lorz and J. J. Gonor. 1982. Biokinetic behavior of technetium in the red abalone, *Haliotis rufescens*: a reassessment. *Health Physics* 43:501-507.
- Beasley, T. M., R. Carpenter and C. D. Jennings. 1982. Plutonium, ^{241}Am and ^{137}Cs ratios, inventories and vertical profiles in Washington and Oregon continental shelf sediments. *Geochimica et Cosmochimica Acta* 46:1931-1946.
- Jennings, C. D. and T. M. Beasley. 1982. Radiochemical determination of Cobalt-60 in environmental samples. *Talanta* 29:871-873.
- Kendall, A. W., C. D. Jennings, T. M. Beasley, R. Carpenter and B. L. K. Somayajulu. 1983. Discovery of a cluster of unhatched fish eggs of a zoarcid buried 10 to 12 cm deep in continental slope sediments off Washington State, USA. *Marine Biology* 75:193-199.
- Beasley, T. M. and C. D. Jennings. 1984. Inventories of ^{239}Pu , ^{240}Pu , ^{241}Am , ^{137}Cs and ^{60}Co in Columbia River sediments from Hanford to the Columbia River estuary. *Environmental Science & Technology* 18:207-212.

DAVID CARLSON

- Carlson, D. J. and M. L. Carlson. 1984. Reassessment of exudation by fucoid macroalgae. *Limnology and Oceanography* 29:1077-1087.
- Paul, J. H. and D. J. Carlson. 1984. Genetic material in the marine environment: Implication for bacterial DNA. *Limnology and Oceanography* 29:1091-1097.
- Carlson, D. J. et al. 1984. Effect of an intertidal mudflat on plankton of the overlying water column. *Canadian J. Fisheries and Aquatic Sciences* 41:1523-1528.

- Carlson, D. J., L. M. Mayer, M. L. Brann and T. H. Mague. 1985. Binding of monomeric organic compounds to macromolecular dissolved organic matter in seawater. *Marine Chemistry* 16:141-153.
- Carlson, D. J., M. L. Brann, T. H. Mague and L. M. Mayer. 1985. Molecular weight distribution of dissolved organic materials in seawater determined by ultrafiltration: A re-examination. *Marine Chemistry* 16:155-171.

CHEN-TUNG (ARTHUR) CHEN

- Chen, C. T. and F. J. Millero. 1979. Gradual increase of oceanic carbon dioxide. *Nature* 277:205-206.
- Millero, F. J., J. Morse and C. T. Chen. 1979. The carbonate system in the western Mediterranean Sea. *Deep-Sea Research* 26:1395-1404.
- Chen, C. T. and R. Pytkowicz. 1979. On the total CO_2 -titration alkalinity-oxygen system in the Pacific Ocean. *Nature* 281:362-365.
- Millero, F. J., C. T. Chen, A. Bradshaw and K. Schleicher. 1980. A new high pressure equation of state for seawater. *Deep-Sea Research* 27A:255-264.
- Chen, C. T., J. H. Chen and F. J. Millero. 1980. Densities of NaCl , MgCl_2 , Na_2SO_4 , and MgSO_4 aqueous solutions at one atm from 0 to 50°C and 0.001 to 1.5 m. *J. Chemical and Engineering Data* 25:307-310.
- Chen, C. T. 1981. Geothermal system at 21°N . *Science* 211:297.
- Chen, C. T. and F. J. Millero. 1981. The equation of state of D_2O determined from sound speeds. *J. Chemical Physics* 75:3553-3558.
- Chen, C. T. and F. J. Millero. 1981. Equations of state for NaCl , MgCl_2 , Na_2SO_4 aqueous solutions at high pressures. *J. Chemical and Engineering Data* 26:270-274.
- Olson, E. J. and C. T. Chen. 1982. Interference in the determination of calcium in seawater. *Limnology and Oceanography* 27:375-380.
- Chen, C. T. and W. L. Marshall. 1982. Amorphous silica solubilities. IV. Behavior in pure water and aqueous sodium chloride, sodium sulfate, magnesium chloride, and magnesium sulfate aqueous solutions up to 350°C . *Geochimica et Cosmochimica Acta* 46:279-287.
- Marshall, W. L. and C. T. Chen. 1982. Amorphous silica solubilities. V. Predictions of solubility behavior in aqueous mixed electrolyte solutions up to 300°C . *Geochimica et Cosmochimica Acta* 46:289-291.
- Marshall, W. L. and C. T. Chen. 1982. Amorphous silica solubilities. VI. Postulated sulfate-silicic acid solution complex. *Geochimica et Cosmochimica Acta* 46:367-370.
- Chen, C. T., F. J. Millero and R. M. Pytkowicz. 1982. Comment on Calculating the oceanic CO_2 increase: a need for caution by A. M. Shiller. *J. Geophysical Research* 87:2083-2085.
- Chen, C. T. 1982. Oceanic penetration of excess CO_2 in a cross section between Alaska and Hawaii. *Geophysical Research Letters* 9:117-119.
- Millero, F. J., C. T. Chen, A. Bradshaw and K. Schleicher. 1982. A new high pressure equation of state for seawater. *Marine Geodesy* 5:367-370.
- Chen, C. T., R. M. Pytkowicz and E. J. Olson. 1982. Evaluation of the calcium problem in the South Pacific. *Geochemical J.* 16:1-10.
- Chen, C. T. 1982. On the distribution of anthropogenic CO_2 in the Atlantic and Southern oceans. *Deep-Sea Research* 29:563-580.
- Chang, C. P., L. S. Liu and C. T. Chen. 1982. The mean oceanic residence time. *Marine Chemistry* 11:293-295.
- Chen, C. T. 1982. Specific heat capacities of aqueous sodium chloride solutions at high pressure. *J. Chemical and Engineering Data* 27:350-358.

- Feely, R. A. and C. T. Chen. 1982. The effect of excess CO₂ on the calculated calcite and aragonite saturation horizons in the Northeast Pacific. *Geophysical Research Letters* 9:1294-1297.
- Zhang, Z. B., L. S. Liu and C. T. Chen. 1983. Relationship between $\phi(Z/l, x)$ rule of chemical processes in seawater and HSAB principle Principle of least Σ and chemical model of seawater. *Scientia Sinica (Series B)* 1:1-12 (in Chinese) and 26:561-576 (in English).
- Zhang, Z. B., L. S. Liu and C. T. Chen. 1983. The least Σ principle and chemical model of seawater. *Acta Oceanologica Sinica* 5:41-56 (in Chinese).
- Gordon, A. L., C. T. Chen and W. G. Metcalf. 1984. Winter mixed layer entrainment of Weddell Deep Water. *J. Geophysical Research* 89(C1):637-640.
- Chen, C.-T. A. 1985. Preliminary observations of oxygen and carbon dioxide of the wintertime Bering Sea marginal ice zone. *Continental Shelf Research* 4:465-483.

ROBERT COLLIER

- Collier, R. W. and J. M. Edmond. 1983. Plankton compositions and trace element fluxes from the surface ocean. *In* Trace Elements in Seawater, C. S. Wong, editor. Plenum Press, NY. pp. 789-809.
- Collier, R. W. and J. Edmond. 1984. The trace element geochemistry of marine biogenic particulate matter. *Progress in Oceanography* 13:113-199.
- Collier, R. W. 1984. Particulate and dissolved vanadium in the North Pacific Ocean. *Nature* 309:441-444.
- Collier, R. W. 1985. Molybdenum in the Northeast Pacific Ocean. *Limnology and Oceanography* 30:1351-1354.

LOUIS I. GORDON

- Cohen, Y. and L. I. Gordon. 1979. Nitrous oxide production in the ocean. *J. Geophysical Research* 84(C1):347-353.
- Corliss, J. B., J. Dymond, L. I. Gordon, et al. 1979. Submarine Thermal Springs on the Galapagos Rift. *Science* 203:1073-1083.
- Corliss, J. B., J. Dymond and L. I. Gordon. 1979. Some implications of heat/mass transfer ratios in Galapagos Rift hydrothermal fluids for models of seawater rock interaction and the formation of oceanic crust. *American Geophysical Union Maurice Ewing Series* 2:391-402.
- Edmond, J. M., J. B. Corliss and L. I. Gordon. 1979. Ridge crest hydrothermal metamorphism at the Galapagos spreading center and reverse weathering. *American Geophysical Union Maurice Ewing Series* 2:383-390.
- Edmond, J. M., C. Measures, R. E. McDuff, L. H. Chan, R. Collier, B. Grant, L. I. Gordon and J. B. Corliss. 1979. Ridge crest hydrothermal activity and the balances of the major and minor elements in the ocean: The Galapagos data. *Earth and Planetary Science Letters* 46:1-18.
- Edmond, J. M., C. Measures, B. Mangum, B. Grant, F. R. Sclater, R. Collier, A. Hudson, L. I. Gordon and J. B. Corliss. 1979. On the formation of metal-rich deposits at ridge crests. *Earth and Planetary Science Letters* 46:19-30.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1982. Dissolved hydrogen and methane in Saanich Inlet, British Columbia. *Deep-Sea Research* 29:1471-1484.

- Nelson, D. M. and L. I. Gordon. 1982. Production and pelagic dissolution of silica in the Southern Ocean. *Geochimica et Cosmochimica Acta* 46:491.
- von Breymann, M. T., M. A. de Angelis and L. I. Gordon. 1982. Gas chromatography with electron capture detection for determination of hydroxylamine in seawater. *Analytical Chemistry* 54:1209.
- Lilley, M. D., M. A. de Angelis and L. I. Gordon. 1982. CH_4 , H_2 , CO and N_2O in submarine hydrothermal vent waters. *Nature* 300:48-50.
- Baross, J. A., M. D. Lilley and L. I. Gordon. 1982. Is the H_2 , CH_4 and CO from submarine hydrothermal environments produced by thermophilic bacteria? *Nature* 298:366-368.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1983. Reduced gases in hydrothermal fluids: The Galapagos spreading center and 21°N East Pacific Rise. In *Hydrothermal Processes at Seafloor Spreading Centers*. P. A. Rona, et al., eds. Plenum Press, New York. p. 411-499.
- Dymond, J., R. Cobler, L. Gordon et al. 1983. ^{226}Ra and ^{222}Rn contents of Galapagos Rift hydrothermal waters: The importance of low-temperature interactions with crustal rocks. *Earth and Planetary Science Letters* 64:417-429.
- Jennings, J. C., L. I. Gordon and D. M. Nelson. 1984. Nutrient depletion indicates high primary productivity in the Weddell Sea. *Nature* 309:51-54.
- de Angelis, M. and L. I. Gordon. 1985. Upwelling and river runoff as sources of dissolved nitrous oxide to the Alsea Estuary, Oregon. *Estuarine, Coastal and Shelf Science* 20:375-386.

CHIH-AN HUH

- Huh, C.-A. and M. P. Bacon. 1985 Thorium-232 in the eastern Caribbean Sea. *Nature* 316:718-721.
- Bacon, M. P., C.-A. Huh, A. P. Fleer and W. G. Deuser. 1985. Seasonality in the flux of natural radionuclides and plutonium in the deep Sargasso Sea. *Deep-Sea Research* 32:273-286.
- Huh, C.-A. and M. P. Bacon. 1985. Determination of thorium concentrations in seawater by neutron activation analysis. *Analytical Chemistry* 57:2138-2142.

FREDERICK G. PRAHL

- Jones, R. D. and F. G. Prahl. 1985. Lipid composition of a marine ammonium oxidizer grown at 5 and 25°C. *Marine Ecology Progress Series* 26:157-159.

RICARDO M. PYTKOWICZ

- Johnson, K. S., R. M. Pytkowicz and C. S. Wong. 1979. Biological production and the exchange of oxygen and carbon dioxide across the sea surface in Stuart Channel, British Columbia. *Limnology and Oceanography* 24:474-482.
- Johnson, K. S. and R. M. Pytkowicz. 1979. Ion association of chloride and sulphate with sodium, potassium, magnesium and calcium in seawater at 25°C. *Marine Chemistry* 8:87-93.

- Pytkowicz, R. M. and K. S. Johnson. 1979. Lattice theories and a new lattice concept for ionic solutions. In Activity Coefficients in Electrolyte Solutions, R. M. Pytkowicz, editor. CRC Press, Boca Raton, Florida, Vol. 1. pp. 209-264.
- Pytkowicz, R. M. and K. S. Johnson. 1979. Ion association and activity coefficients in multicomponent solutions. In Activity Coefficients in Electrolyte Solutions, R. M. Pytkowicz, editor. CRC Press, Boca Raton, Florida, Vol. 2. pp. 1-62.
- Pytkowicz, R. M. 1979. Activity coefficients, ionic media, and equilibria in solutions. In Activity Coefficients in Electrolyte Solutions, R. M. Pytkowicz, editor. CRC Press, Boca Raton, Florida, Vol. 2. pp. 301-306.
- Pytkowicz, R. M. 1979. Excess crustal calcium problem. *Geochemical J.* 13:15-17.
- Chen, C.-T. and R. M. Pytkowicz. 1979. On the total CO₂-titration alkalinity-oxygen system in the Pacific Ocean. *Nature* 281:362-365.
- Pytkowicz, R. M. 1979. pH of seawater. *Environment International* 2:417-418.
- Sipos, L., B. Raspor, H. W. Nurnberg and R. M. Pytkowicz. 1980. Interaction of metal complexes with coulombic ion-pairs in aqueous media of high salinity. *Marine Chemistry* 9:37-47.
- Pytkowicz, R. M. 1980. Activity coefficients, ionic media, and equilibrium constants. In Thermodynamics of Aqueous Systems with Industrial Applications, S. A. Newman, editor. ACS Symposium Ser. no. 133, American Chemical Society, Washington, D.C. pp. 561-567.
- Pytkowicz, R. M. and M. R. Cole. 1980. Equilibrium and kinetic problems in mixed electrolyte solutions. In Thermodynamics of Aqueous Systems with Industrial Applications, S. A. Newman, editor. ACS Symposium Ser. no. 133, American Chemical Society, Washington, D.C. pp. 643-652.
- Plath, D. C., K. S. Johnson and R. M. Pytkowicz. 1980. The solubility of aragonite in seawater at 25°C and 32.62‰ salinity. *Marine Chemistry* 10:9-29.
- Pytkowicz, R. M. 1980. Further thoughts on the excess crustal calcium. *Geochemical J.* 14:47-50.
- Johnson, K. S. and R. M. Pytkowicz. 1980. The activity of NaCl in seawater of 10-40‰ salinity and 5-25°C at 1 atmosphere. *Marine Chemistry* 10:85-91.
- Chen, C.-T. A., R. M. Pytkowicz and E. J. Olson. 1982. Evaluation of the calcium problem in the South Pacific. *Geochemical J.* 16:1-10.
- Pytkowicz, R. M. 1983. Equilibria, Non-Equilibria, and Natural Waters. Wiley-Interscience, New York. v.1 351 p., v.2 353 p.
- Pytkowicz, R. M. 1983. Thoughts on "MgSO₄ ion association in seawater" by Fisher, Gieskes and Hsu. *Marine Chemistry* 13:73-74.
- Pytkowicz, R. M. 1984. Ionic strength effects on natural water chemistry. In Gas-Liquid Chemistry of Natural Waters, vol. 7, L. Newman, editor. Brookhaven National Laboratory, New York. pp. 33.1-33.6.
- Pytkowicz, R. M. and C.-T. A. Chen. 1984. Ionic strength, solubility, and gas exchange across the sea surface. In Gas-Liquid Chemistry of Natural Waters, vol. 7, L. Newman, editor. Brookhaven National Laboratory, New York. pp. 34.1-34.7.

BERND R. T. SIMONEIT

- Simoneit, B. R. T. 1983. Organic geochemistry of laminated sediments from the Gulf of California. In Coastal Upwelling. Its Sediment Record, Part A, E. Suess and J. Thiede, editors. Plenum, New York. pp. 527-544.
- Simoneit, B. R. T., M. A. Mazurek and W. E. Reed. 1983. Characterization of organic matter in aerosols over rural sites: Phytosterols. In Advances in Organic Geochemistry 1981, M. Bjoroy et al., editors. J. Wiley and Sons Ltd., Chichester. pp. 355-361.
- Philp, R. P., B. R. T. Simoneit and T. D. Gilbert. 1983. Diterpenoids in crude oils and coals of Southeastern Australia. In Advances in Organic Geochemistry 1981, M. Bjoroy et al., J. Wiley and Sons, Ltd., Chichester. pp. 698-704.
- Risebrough, R. W. et al. including B. R. T. Simoneit. 1983. Application of the mussel watch concept in studies of the distribution of hydrocarbons in the coastal zone of the Ebro Delta. Marine Pollution Bulletin 14:181-187.
- Simoneit, B. R. T. 1983. Effects of hydrothermal activity on sedimentary organic matter: Guaymas Basin, Gulf of California - petroleum genesis and protokerogen degradation. In: Hydrothermal Processes at Seafloor Spreading Centers, P. Rona et al., editors. Plenum Press, New York. pp. 451-471.
- Didyk, B. M., B. R. T. Simoneit and G. Eglinton. 1983. Bitumen from Coalport Tar Tunnel. Organic Geochemistry 5:99-109.
- Simoneit, B. R. T. and E. M. Galimov. 1984. Geochemistry of interstitial gases in Quaternary sediments of the Gulf of California. Chemical Geology 43:151-166.
- Simoneit, B. R. T. 1984. Hydrothermal effects on organic matter - high vs. low temperature components. Organic Geochemistry 6:857-864.
- Simoneit, B. R. T., R. P. Philp, P. B. Jenden and E. M. Galimov. 1984. Organic geochemistry of Deep Sea Drilling Project sediments from the Gulf of California - Hydrothermal effects on unconsolidated diatom ooze. Organic Geochemistry 7:173-205.
- Simoneit, B. R. T. 1984. Organic matter of the troposphere: III Characterization and sources of petroleum and pyrogenic residues in aerosols over the Western United States. Atmospheric Environment 18:5167.
- Simoneit, B. R. T. 1984. Application of molecular marker analysis to reconcile. Sources of carbonaceous particulates in tropospheric aerosols. The Science of the Total Environment 36:61-72.
- Howard, D. H., B. R. T. Simoneit and D. J. Chapman. 1984. Triterpenoids from lipids of Rhodocrobium Vanniellii. Archives of Microbiology 137:200-204.
- Simoneit, B. R. T., V. T. Vuchev and J. O. Grimalt. 1984. Organic matter along the sedimentary sequences of the Moroccan Continental Margin, Leg 79, Sites 545 and 547. In: Initial Reports of the Deep Sea Drilling Project, 79, K. Hinz, E. L. Winterer et al., eds., U.S. Govt. Printing Off., Washington, D.C., p. 807-824.
- Simoneit, B. R. T. 1985. Hydrothermal Petroleum: Composition and utility as a biogenic carbon source. Biological Soc. Washington Bulletin 6:49-56.
- Simoneit, B. R. T. 1985. Application of molecular marker analysis to vehicular exhaust for source reconciliations. International J. Environmental Analytical Chemistry 22:203-223.
- Simoneit, B. R. T. 1985. Hydrothermal petroleum: genesis, migration and deposition in Guaymas Basin, Gulf of California. Canadian J. Earth Sciences 22:1919-1929.

- Ishiwatari, R., S. Morinaga and B. R. T. Simoneit. 1985. Alkaline permanganate oxidation of kerogens from Cretaceous black shales thermally altered by diabase intrusions and laboratory simulations. *Geochimica et Cosmochimica Acta* 49:1825-1835.
- Simoneit, B. R. T. and H. R. Beller. 1985. Lipid geochemistry of the Cretaceous/Tertiary boundary sediments, Hole 577, Deep Sea Drilling Project Leg 86. In: Heath, G. R., Burckle, L. H., et al., Init. Repts. DSDP, 86: Washington (U.S. Govt. Printing Office) pp.671-674.
- Wright, A. A., V. Bleil, et al, including B. R. T. Simoneit. 1985. Summary of Cretaceous/Tertiary boundary studies, Deep Sea Drilling Project Site 577, Shatsky Rise. In: Heath, G. R., Burckle, L. H., et al, Init. Repts. DSDP, 86: Washington (U.S. Govt. Printing Office) pp.799-804.
- Brault, M., B. R. T. Simoneit, J.-C. Marty and A. Saliot. 1985. Les hydrocarbures dans le système hydrothermal de la ride Est Pacifique, à 13°N. *Comptes Rendus, Académie des Sciences, Paris, t.301, Série II* pp.807-812.

II. RESEARCH ASSISTANTS AND STUDENTS

LARY BALL

- Beasley, T. M. and L. A. Ball. 1980. ^{243}Pu and ^{244}Pu in Columbia River Sediments. *Nature* 287:624-625.
- Beasley, T. M., L. A. Ball, J. E. Andrews and J. E. Halverson. 1981. Hanford-derived plutonium in Columbia River sediments. *Science* 214:913-915.
- Beasley, T. M., L. A. Ball and B. A. Blakesley. 1981. Plutonium and americium export to the north-east Pacific Ocean by Columbia River runoff. *Estuarine, Coastal and Shelf Science* 13:659-669.

HARRY R. BELLER

- Simoneit, B. R. T. and H. R. Beller. 1985. Lipid geochemistry of the Cretaceous/Tertiary boundary sediments, Hole 577, Deep Sea Drilling Project Leg 86. In: Heath, G. R., Burckle, L. H., et al, Init. Repts. DSDP, 86: Washington (U.S. Govt. Printing Office) pp.671-674.

MARIE DE ANGELIS

- Lilley, M. D., M. A. de Angelis and L. I. Gordon. 1982. CH_4 , H_2 , CO and N_2O in submarine hydrothermal vent waters. *Nature* 300:48-50.
- von Breymann, M. T., M. A. de Angelis and L. I. Gordon. 1982. Gas chromatography with electron capture detection for determination of hydroxylamine in seawater. *Analytical Chemistry* 54:1209.
- de Angelis, M. and L. I. Gordon. 1985. Upwelling and river runoff as sources of dissolved nitrous oxide to the Alsea Estuary, Oregon. *Estuarine, Coastal and Shelf Science* 20:375-286.

JOSEPH JENNINGS

- Jennings, J. C., L. I. Gordon and D. M. Nelson. 1984. Nutrient depletion indicates high primary productivity in the Weddell Sea. *Nature* 309:51-54.

KENNETH S. JOHNSON

- Johnson, K. S., R. M. Pytkowicz and C. S. Wong. 1979. Biological production and the exchange of oxygen and carbon dioxide across the sea surface in Stuart Channel, British Columbia. *Limnology and Oceanography* 24:474-482.
- Johnson, K. S. and R. M. Pytkowicz. 1979. Ion association of chloride and sulphate with sodium, potassium, magnesium and calcium in seawater at 25°C. *Marine Chemistry* 8:87-93.
- Pytkowicz, R. M. and K. S. Johnson. 1979. Lattice theories and a new lattice concept for ionic solution. *In* Activity Coefficients in Electrolyte Solutions, R. M. Pytkowicz, editor. CRC Press, Boca Raton, Florida, Vol. 1. pp. 209-264.
- Pytkowicz, R. M. and K. S. Johnson. 1979. Ion association and activity coefficients in multicomponent solutions. *In* Activity Coefficients in Electrolyte Solutions, R. M. Pytkowicz, editor. CRC Press, Boca Raton, Florida, Vol. 2. pp. 1-62.
- Plath, D. C., K. S. Johnson and R. M. Pytkowicz. 1980. The solubility of aragonite in seawater at 25°C and 32.62‰ salinity. *Marine Chemistry* 10:9-29.

MARVIN LILLEY

- Baross, J. A., C. N. Dahm, A. K. Ward, M. D. Lilley and J. R. Sedell. 1982. Initial microbiological response in lakes to the Mt. St. Helens eruption. *Nature* 296:49-52.
- Baross, J. A., M. D. Lilley and L. I. Gordon. 1982. Is the CH₄, H₂, and CO venting from submarine hydrothermal systems produced by thermophilic bacteria? *Nature* 298:366-368.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1982. Dissolved hydrogen and methane in Saanich Inlet, British Columbia. *Deep-Sea Research* 29:1471-1484.
- Lilley, M. D., M. A. de Angelis and L. I. Gordon. 1982. CH₄, H₂, CO and N₂O in submarine hydrothermal vent waters. *Nature* 300:48-50.
- Ward, A. K., J. A. Baross, C. N. Dahm, M. D. Lilley and J. R. Sedell. 1983. Algal composition and activity in several aquatic environments within the blast zone of Mt. St. Helens: 1980-1981. *J. Phycology* 19:238-247.
- Dahm, C. N., J. A. Baross, A. K. Ward, M. D. Lilley and J. R. Sedell. 1983. Initial effects of the eruption of Mt. St. Helens on nitrogen cycle and related chemical processes in Ryan Lake. *Applied and Environmental Microbiology* 45:1633-1645.
- Lilley, M. D., J. A. Baross and L. I. Gordon. 1983. Reduced gases and bacteria in hydrothermal fluids: the Galapagos Spreading Center and 21°N East Pacific Rise. *In* Hydrothermal Processes at Seafloor Spreading Centers, P. Rona et al., editors. Plenum Press, New York. pp. 411-449.

ERIC OLSON

Chen, C.-T. A., R. M. Pytkowicz and E. J. Olson. 1982. Evaluation of the calcium problem in the South Pacific. *Geochemical J.* 16:1-10.

MARTA VON BREYMANN

von Breymann, M. T., M. A. de Angelis and L. I. Gordon. 1982. Gas chromatography with electron capture detection for determination of hydroxylamine in seawater. *Analytical Chemistry* 54:1209.

MARINE GEOLOGY

I. FACULTY

JOHN CORLISS

- Edmond, J. M., C. Measures, R. E. McDuff, L. H. Chan, R. Collier, B. Grant, L. I. Gordon and J. B. Corliss. 1979. Ridge crest hydrothermal activity and the balances of the major and minor elements in the ocean: The Galapagos data. *Earth and Planetary Science Letters* 46:1-18.
- Edmond, J. M., C. Measures, B. Mangum, B. Grant, F. R. Sclater, R. Collier, A. Hudson, L. Gordon and J. B. Corliss. 1979. On the formation of metal rich deposits at ridge crests. *Earth and Planetary Science Letters* 46:19-30.
- Corliss, J. B., J. Dymond et al. 1979. Submarine thermal springs on the Galapagos Rift. *Science* 203:1073-1083.
- Corliss, J. B., J. M. Edmond and L. I. Gordon. 1979. Some implications of heat/mass transfer ratios in Galapagos Rift hydrothermal fluids for models of seawater-rock interaction and the formation of oceanic crust. *American Geophysical Union Maurice Ewing Series* 2:391-402.
- Edmond, J. M., J. B. Corliss and L. I. Gordon. 1979. Ridge crest hydrothermal metamorphism at the Galapagos spreading center and reverse weathering. *American Geophysical Union Maurice Ewing Series* 2:383-390.
- Scheidegger, K. F., J. B. Corliss, P. A. Jezek and D. Ninkovich. 1980. Compositions of deep-sea ash layers derived from North Pacific volcanic arcs: Variations in time and space. *J. Volcanology and Geothermal Research* 7:107-137.
- Dymond, J., J. B. Corliss, R. Cobler, C. Muratli, C. Chou and R. Conard. 1980. Composition and origin of sediments recovered by deep drilling of sediment mounds, Galapagos Spreading Center. In: Rosendahl, B., R. Hekinian et al., Initial Reports DSDP, 54, Washington (U.S. Govt. Printing Office), 377-386.
- Corliss, J. B., J. A. Baross and S. E. Hoffman. 1981. An hypothesis concerning the relationship between submarine hot springs and the origin of life on earth. *Oceanologica Acta* SP:59-69.
- Scheidegger, K. F. and J. B. Corliss. 1981. Petrogenesis and secondary alteration of upper layer 2 basalts of the Nazca Plate. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. *Geological Soc. of America Memoir* No. 154. p. 77-107.

ELLEN T. DRAKE

- Drake, E. T. 1980. Dinosaurs and international relations 1910-1917. *J. Geological Education* 28:193-198.
- Drake, E. T. and P. Komar. 1981. A comparison of the geological contributions of Nicolaus Steno and Robert Hooke. *J. Geological Education* 29:127-134.
- Drake, E. T. 1981. The Hooke imprint on the Huttonian Theory. *American J. Science* 281:963-973.
- Drake, E. T. 1982. Tectonic evolution of the Oregon continental margin. *Oregon Geology* 44:15-21.
- Drake, E. T. 1982. Robert Hooke and the Huttonian Theory: a discussion. *J. Geology* 91:231-232.

- Drake, E. T. 1983. Speculations about the Earth: Robert Hooke and others in the 17th Century. *J. History of Earth Sciences Society* 2:11-16.
- Drake, E. T. and P. Komar. 1984. The origin of impact craters: ideas and experiments of Hook, Gilbert and Wegener. *Geology* 12:408-411.

ROBERT DUNCAN

- McDougall, I. and R. A. Duncan. 1980. Linear volcanic chains recording plate motions? *Tectonophysics* 63:275-295.
- Duncan, R. A. and D. H. Green. 1980. Role of multistage melting in the formation of oceanic crust. *Geology* 8:22-26.
- Duncan, R. A. 1981. Hotspots in the southern oceans - an absolute frame of reference for motion of the Gondwana continents. *Tectonophysics* 74:29-42.
- Magill, J., A. Cox and R. Duncan. 1981. Tillamook volcanic series: Further evidence for tectonic rotation of the Oregon Coast Range. *J. Geophysical Research* 86(B4):2953-2970.
- Emerick, C. M. and R. A. Duncan. 1982. Age progressive volcanism in the Comores Archipelago, western Indian Ocean and implications for Somali plate tectonics. *Earth and Planetary Science Letters* 60:415-428.
- Duncan, R. A. 1982. A captured island chain in the Coast Range of Oregon and Washington. *J. Geophysical Research* 87(B13):10,827-10,837.
- Globerman, B. R., M. E. Beck, Jr. and R. A. Duncan. 1982. Paleomagnetism and tectonic significance of Eocene basalts from the Black Hills, Washington Coast Range. *Geological Soc. America Bulletin* 93:1151-1159.
- Bryan, W. B. and R. A. Duncan. 1983. Age and provenance of clastic horizons from Hole 516F. In: Barker, P. F., R. Carlson and D. Johnson, eds., *Initial Reports of DSDP, 72*, Washington (U.S. Govt. Printing Office), 475-477.
- Morrice, M. G., P. A. Jezek, J. B. Gill, D. J. Whitford, and R. A. Duncan. 1983. Volcanism accompanying arc-arc collision in the Molluca Sea, Indonesia. *J. Volcanology and Geothermal Research* 19:136-165.
- Duncan, R. A. and R. B. Hargraves. 1984. Plate tectonic evolution of the Caribbean region in the mantle reference frame. In: Bonini, W. and R. Hargraves, eds., *Geological Soc. America Memoir* 162:81-93.
- Duncan, R. A. 1984. Age progressive volcanism in the New England seamounts and the opening of the central Atlantic Ocean. *J. Geophysical Research* 89(B12):9980-9990.
- Schlanger, S. O., M. O. Garcia, B. H. Keating, J. J. Naughton, W. Sager, J. Haggerty, J. Philpotts and R. A. Duncan. 1984. Geology and geochronology of the Line Islands. *J. Geophysical Research* 89(B13):11,261-11,272.
- McBirney, A. R., A. B. Cullen, D. Geist, E. P. Vicenzi, R. A. Duncan, M. L. Hall and M. Estrella. 1985. The Galapagos volcano Alcedo: A unique ocean caldera. *J. Volcanology and Geothermal Research* 26:173-177.
- Geist, D. J., A. R. McBirney and R. A. Duncan. 1985. Geology of Santa Fe Island: The oldest Galapagos volcano. *J. Volcanology and Geothermal Research* 26:203-212.
- Silver, E. A., J. B. Gill, D. Schwartz, H. Prasetyo and R. A. Duncan. 1985. Evidence for a submerged and displaced continental borderland, north Banda Sea, Indonesia. *Geology* 13:687-691.

- Williams, D., K. Green, T. van Andel, R. P. von Herzen, J. Dymond and K. Crane. 1979. The hydrothermal mounds of the Galapagos Rift: Observations with DSRV ALVIN and detailed heat flow studies. *J. Geophysical Research* 84(B13):7467-7688.
- Hart, R., J. Dymond and L. Hogan. 1979. Preferential formation of the atmosphere-sialic crust system from the upper mantle. *Nature* 278:156-159.
- Corliss, J., J. Dymond, L. Gordon, J. Edmond, R. von Herzen, D. Green, D. Williams and T. van Andel. 1979. Submarine thermal springs on the Galapagos Rift. *Science* 203:1073-1083.
- Hart, R., J. Dymond and L. Hogan. 1979. A model for preferential degassing of the upper mantle, a reply to D. W. Schartzman. *Nature* 281:610.
- Dymond, J., J. B. Corliss, R. Cobler, C. Muratli, C. Chou and R. Conard. 1980. Composition and origin of sediments recovered by deep drilling of sediment mounds, Galapagos Spreading Center. In: Rosendahl, B., R. Hekinian et al., Initial Reports DSDP, 54, Washington (U.S. Govt. Printing Office), 377-386.
- Cobler, R. and J. Dymond. 1980. Sediment trap experiment on the Galapagos Spreading Center, Equatorial Pacific. *Science* 209:801-803.
- Dymond, J., K. Fischer, M. Clauson, R. Cobler, W. Gardner, J. J. Richardson, W. Berger, A. Soutar and R. Dunbar. 1981. A sediment trap intercomparison study in the Santa Barbara Basin. *Earth and Planetary Science Letters* 53:409-418.
- Dymond, J. 1981. Geochemistry of Nazca Plate surface sediments: An evaluation of hydrothermal, biogenic, detrital, and hydrogenous sources. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Society of America Memoir No. 154, p. 133-174.
- Heath, G. R. and J. Dymond. 1981. Metalliferous-sediment deposition in time and space: East Pacific Rise and Bauer Basin, northern Nazca Plate. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Society of America Memoir No. 154, p. 175-198.
- Moore, W. S., T.-L. Ku, J. D. Macdougall, V. M. Burns, R. Burns, J. Dymond, M. W. Lyle and D. Z. Piper. 1981. Fluxes of metals to a manganese nodule: Radiochemical, chemical, structural and mineralogical studies. *Earth and Planetary Science Letters* 52:151-171.
- Hart, R., J. Dymond, L. Hogan and J. G. Schilling. 1983. Mantle plume primordial noble gas component in glassy basalts from the Reykjanes Ridge. *Nature* 305:403-406.
- Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variation in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors, Coastal Upwelling: Its Sediment Record, Part A. Plenum Press, New York. p. 209-224.
- Dymond, J., R. Cobler, L. Gordon, P. Biscaye and G. Mathieu. 1983. ^{226}Ra and ^{222}Rn contents of Galapagos Rift hydrothermal waters: The importance of low-temperature interactions with crustal rocks. *Earth and Planetary Science Letters* 64:417-429.
- Murphy, K. and J. Dymond. 1984. Rare earth element fluxes and geochemical budget in the Eastern Equatorial Pacific. *Nature* 307:444-447.
- Dymond, J., M. Lyle, B. Finney, D. Z. Piper, K. Murphy, R. Conard and N. Pisiias. 1984. Ferromanganese nodules from MANOP sites H, S, and R--Control of mineralogical and chemical composition by multiple accretionary processes. *Geochimica et Cosmochimica Acta* 48:931-949.

- Dymond, J. and M. Lyle. 1985. Flux comparisons between sediments and sediment traps in the eastern tropical Pacific: Implications for atmospheric CO₂ variations during the Pleistocene. *Limnology and Oceanography* 30:699-712.
- Hart, R., L. Hogan and J. Dymond. 1985. The closed-system approximation for evolution of argon and helium in the mantle, crust and atmosphere. *Chemical Geology (Isotope Geoscience Section)* 52:45-73.

ROGER HART

- Hart, R., J. Dymond and L. Hogan. 1979. Preferential formation of the atmosphere-sialic crust system from the upper mantle. *Nature* 278:156-159.
- Hart, R., J. Dymond and L. Hogan. 1979. Reply to: A model for the preferential degassing of the upper mantle, by D. W. Schwartzman. *Nature* 281:610.
- Hart, R. 1980. K-Ar studies of cherts from DSDP site 464, Northern Hess Rise. In: J. Thiede and T. L. Vallier, editors, *Initial Reports DSDP, 62*, Washington (U.S. Govt. Printing Office). p. 779-780.
- deWit, M., R. Hart, A. Martin, and P. Abbott. 1982. Archaean abiogenic and probable biogenic structures associated with mineralized hydrothermal vent systems and regional metasomatism with implications for Greenstone Belt studies. *Economic Geology* 77:1783-1802.
- Hart, R., J. Dymond, L. Hogan and J. G. Schilling. 1983. Mantle plume noble gas component in glassy basalts from the Reykjanes Ridge. *Nature* 305:403-407.
- Hart, R., L. Hogan and J. Dymond. 1985. The closed-system approximation for evolution of argon and helium in the mantle, crust and atmosphere. *Chemical Geology (Isotope Geoscience Section)* 52:45-73.

G. ROSS HEATH

- Heath, G. R. 1979. Simulations of a glacial paleoclimate by three different atmospheric general circulation models. *Palaeogeography, Palaeoclimatology, Palaeoecology* 26:291-303.
- Heath, G. R. and N. G. Pisias. 1979. A method for the quantitative estimation of clay minerals in North Pacific deep-sea sediments. *Clays and Clay Minerals* 27:175-184.
- Heath, G. R. 1979. Burial rates, growth rates, and size distribution of deepsea manganese nodules. *Science* 205:903-904.
- Hinga, K. R., J. McN. Sieburth and G. R. Heath. 1979. The supply and use of organic material at the deep-sea floor. *J. Marine Research* 37:557-579.
- Kominz, M. A., G. R. Heath, T.-L. Ku and N. G. Pisias. 1979. Brunhes time scales and the interpretation of climatic change. *Earth and Planetary Science Letters* 45:394-410.
- Prince, R. A., G. R. Heath and M. Kominz. 1980. Paleomagnetic studies of central North Pacific sediment cores: Stratigraphy, sedimentation rates, and the origin of magnetic instability: Summary. *Geological Soc. of America Bulletin. Part I*, 91:447-449.
- Prince, R. A., G. R. Heath and M. Kominz. 1980. Paleomagnetic studies of central North Pacific sediment cores: Stratigraphy, sedimentation rates, and the origin of magnetic instability. *Geological Soc. of America Bulletin. Pt. II*, 91:1789-1835.

- Hollister, C. D., D. R. Anderson and G. R. Heath. 1981. Subseabed disposal of nuclear wastes. *Science* 213:1321-1326.
- Heath, G. R. and J. Dymond. 1981. Metalliferous-sediment deposition in time and space: East Pacific Rise and Bauer Basin, northern Nazca Plate. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dash and D. M. Hussong, eds., Geological Soc. of America Memoir 154:175-198.
- Leinen, M. and G. R. Heath. 1981. Sedimentary indicators of atmospheric activity in the northern hemisphere during the Cenozoic. *Palaeogeography, Palaeoclimatology, Palaeoecology* 36:1-21.
- Heath, G. R. 1981. Ferromanganese nodules of the deep sea. *Economic Geology*, 75th Anniversary Volume. p. 736-765.
- Hinga, K., G. R. Heath, D. R. Anderson and C. D. Hollister. 1982. The disposal of high level radioactive wastes by burial in the deep sea floor. *Environmental Science and Technology* 6:28A-37A.
- Miller, S. E., G. R. Heath and R. D. Gonzalez. 1982. Effects of temperature on the sorption of lanthanides by montmorillonite. *Clays and Clay Minerals* 30:111-122.
- Froelich, P. N., M. L. Bender, N. A. Luedtke, G. R. Heath and T. DeVries. 1982. The marine phosphorous cycle. *American J. of Science* 282:474-511.
- Heath, G. R. 1982. Manganese nodules: unanswered questions. *Oceanus* 25(3):37-41.
- Heath, G. R., L. H. Burckle et al. 1982. Glomar Challenger at the Cretaceous-Tertiary boundary. *Nature* 299:208.
- Miller, S. E., G. R. Heath and R. D. Gonzalez. 1983. Effect of pressure on the sorption of Yb by montmorillonite. *Clays and Clay Minerals* 31:17-21.
- Heath, G. R., C. D. Hollister, D. R. Anderson and M. Leinen. 1983. Why consider subseabed disposal of high-level nuclear wastes? In: *Wastes in the Ocean*, Vol. 3, *Radioactive Wastes and the Ocean*, P. K. Park et al., editors. John Wiley and Sons, New York. p. 303-325.
- Laine, E. P., G. R. Heath, E. Ayer and M. Kominz. 1984. Evaluation of the geological stability and predictability of sediment of the northern Bermuda Rise by the Subseabed Disposal Program. *Marine Geotechnology* 5:215-233.
- Silva, A. J., E. P. Laine, J. Lipkin, G. R. Heath and S. A. Akers. 1984. Geotechnical properties of sediments from the North Central Pacific and northern Bermuda Rise. *Marine Geotechnology* 5:235-256.
- Erickson, K. L., W. E. Seyfried, G. R. Heath, J. L. Krumhansl and V. T. Bowen. 1984. Geochemical studies with abyssal red clays. *Marine Geotechnology* 5:297-334.
- Finney, B., G. R. Heath and M. Lyle. 1984. Growth rates of manganese-rich nodules at MANOP site H (Eastern North Pacific). *Geochimica et Cosmochimica Acta* 48:911-919.
- Graybeal, A. L. and G. R. Heath. 1984. Remobilization of transition metals in surficial pelagic sediments from the eastern Pacific. *Geochimica et Cosmochimica Acta* 48:965-975.
- Kadko, D. and G. R. Heath. 1984. Models of depth-dependent bioturbation at Manop Site H in the eastern equatorial Pacific. *J. Geophysical Research* 89(C4):6567-6570.
- Rea, D. K., G. E. Ness and G. R. Heath. 1985. Hemipelagic sedimentation in a region of crustal doming between the Mendocino and Pioneer fracture zones. *Marine Geology* 62:69-84.

LEWIS HOGAN

- Hart, R., J. Dymond and L. Hogan. 1979. Preferential formation of the atmosphere-sialic crust system from the upper mantle. *Nature* 278:156-159.
- Hart, R., J. Dymond and L. Hogan. 1979. Reply to: A model for the preferential degassing of the upper mantle by D. W. Schwartzman. *Nature* 281:610.
- Hart, R., L. Hogan and J. Dymond. 1985. The closed-system approximation for evolution of argon and helium in the mantle, crust and atmosphere. *Chemical Geology (Isotope Geoscience Section)* 52:45-73.

ROBERT HOLMAN

- Holman, R. A. and A. J. Bowen. 1979. Edge waves on complex beach profiles. *J. Geophysical Research* 84(C10):6339-6346.
- Holman, R. A. 1981. Infragravity energy in the surf zone. *J. Geophysical Research* 86(C7):6442-6450.
- Holman, R. A. and A. J. Bowen. 1982. Bars, bumps and holes: models for the generation of complex beach topography. *J. Geophysical Research* 87(C1):457-468.
- Holman, R. A. 1983. Edge waves and the configuration of the shoreline. In: *CRC Handbook of Coastal Processes and Erosion*, P. D. Komar, editor. CRC Press, Boca Raton, FL. 305 p.
- Holman, R. A. and A. J. Bowen. 1984. Longshore structure of infragravity wave motions. *J. Geophysical Research* 89(C4):6446-6452.
- Holman, R. A. and R. T. Guza. 1984. Measuring run-up on a natural beach. *Coastal Engineering* 8:129-140.
- Holman, R. A. and A. H. Sallenger, Jr. 1985. Setup and swash on a natural beach. *J. Geophysical Research* 90(C1):945-953.
- Sallenger, A. H. Jr., R. A. Holman and W. A. Birkemeier. 1985. Storm-induced response of a nearshore-bar system. *Marine Geology* 64:237-257.
- Sallenger, A. H. Jr. and R. A. Holman. 1985. Wave energy saturation on a natural beach of variable slope. *J. Geophysical Research* 90(C6):11,939-11,944.

WILLIAM H. HUTSON

- Prell, W. L., W. H. Hutson and D. F. Williams. 1979. The Subtropical Convergence and late Quaternary circulation in the Southern Indian Ocean. *Marine Micropaleontology* 4:225-234.
- Prell, W. L. and W. H. Hutson. 1979. Zonal temperature - anomaly maps of Indian Ocean surface waters: modern and ice-age patterns. *Science* 206:454-456.
- Hutson, W. T. 1980. The Agulhas Current during the late Pleistocene: analysis of modern faunal analogs. *Science* 207:64-66.
- Hutson, W. T. 1980. Bioturbation of deep-sea sediments: oxygen isotopes and stratigraphic uncertainty. *Geology* 8:127-130.
- Hutson, W. T. and W. L. Prell. 1980. A paleocological transfer function, Fl-2, for Indian Ocean planktonic foraminifera. *J. Paleontology*:381-399.

DAVID KADKO

- Kadko, D. and G. R. Heath. 1984. Models of depth dependent bioturbation at MANOP site H in the eastern equatorial Pacific. *J. Geophysical Research* 89(C4):6567-6570.
- Kadko, D. 1985. Late Cenozoic sedimentation and metal deposition in the North Pacific. *Geochimica et Cosmochimica Acta* 49:651-661.
- Kadko, D. et al. 1985. An estimate of hydrothermal fluid residence times and vent chimney growth rates based on $^{210}\text{Pb}/\text{Pb}$ ratios and mineralogic studies of sulfides dredged from the Juan de Fuca Ridge. *Earth and Planetary Science Letters* 76:35-44.

• GEORGE H. KELLER

- Keller, G. H., D. N. Lambert and R. H. Bennett. 1979. Geotechnical properties of continental slope deposits - Cape Hatteras to hydrographer Canyon. In: L. J. Doyle and O. H. Pilkey (eds.), *Geology of Continental Slopes*. SEPM Spec. Pub. No. 27, 131-151.
- Keller, G. H. and D. N. Lambert. 1980. Variation of sediment geotechnical properties between the Greater Antilles Outer Ridge and the Nares Abyssal Plain. *Marine Geotechnology* 4:119.
- Bennett, R. H., G. L. Freeland, D. N. Lambert, W. B. Sawyer and G. H. Keller. 1980. Geotechnical properties of surficial sediments in a mega-corridor: U.S. Atlantic continental slope, rise, and deepsea basin. *Marine Geology* 38:123-140.
- Bennett, R. H., W. R. Bryant and G. H. Keller. 1981. Clay fabric of selected submarine sediments: fundamental properties and models. *J. Sedimentary Petrology* 51:217-232.
- Busch, W. and G. H. Keller. 1981. The physical properties of Peru-Chile continental margin sediments - the influence of coastal upwelling on sediment properties. *J. Sedimentary Petrology* 51:705-719.
- Lambert, D. N., R. H. Bennett, W. B. Sawyer and G. H. Keller. 1981. Geotechnical properties of continental upper rise sediments--Veatch Canyon to Cape Hatteras. *Marine Geotechnology* 4:281-306.
- Keller, G. H. 1982. Organic matter and the geotechnical properties of submarine sediments. *Geo-Marine Letters* 2:191-198.
- Busch, W. and G. H. Keller. 1982. Consolidation characteristics of sediments from the Peru-Chile continental margin and implications for past sediment instability. *Marine Geology* 45:17-39.
- Mullins, H. T., G. H. Keller et al. 1982. Geology of Great Abaco submarine canyon (Blake Plateau): observations from the research submersible "ALVIN." *Marine Geology* 48:239-257.
- Busch, W. and G. H. Keller. 1983. Analysis of sediment stability on the Peru-Chile continental slope. *Marine Geotechnology* 5:181-211.
- Keller, G. H. 1983. Coastal upwelling, its influence on the geotechnical properties and stability characteristics of submarine eposits. In: J. Thiede and E. Suess, eds., *Coastal Upwelling: Its Sediment Record*, Pt. B, Plenum Press, New York. p. 181-199.
- Keller, G. H. and Y. Yincan. 1985. Geotechnical properties of surface and near-surface deposits in the East China Sea. *Continental Shelf Research* 4:159-174.

The Marine Geotechnical Consortium (including G. H. Keller). 1985.
Geotechnical properties of northwest Pacific pelagic clays: Deep Sea
Drilling Project Leg 86, Hole 576A. In: Initial Reports DSDP v.86.
Heath G. R., L. H. Burckle et al., eds. U.S. Govt. Printing Office.
pp.723-758.

PAUL KOMAR

- Komar, P. D. 1979. Comparisons of the hydraulics of water flows in Martian outflow channels with flows of similar scale on Earth. *Icarus* 37:156-181.
- Komar, P. D. 1979. Beach-slope dependence of longshore currents and an examination of the CERC formula. *J. Waterways, Harbors and Coastal Engineering*. ASCE WW4:460-464.
- Broome, R. and P. D. Komar. 1979. Undular hydraulic jumps and the formation of backwash ripples on beaches. *Sedimentology* 26:543-559.
- Reimers, C. E. and P. D. Komar. 1979. Evidence for explosive volcanic density currents on certain Martian volcanoes. *Icarus* 39:88-110.
- Komar, P. D. 1979. Grain shape effects on settling rates: A reply. *J. Geology* 88:246.
- Miller, M. C. and P. D. Komar. 1979. Measurements of sand spreading rates under near-bottom wave orbital motions. *J. Geology* 87:593-608.
- Miller, M. C. and P. D. Komar. 1980. Oscillatory ripple marks generated by laboratory apparatus. *J. Sedimentary Petrology* 50:173-182.
- Miller, M. C. and P. D. Komar. 1980. A field investigation of the relationship between oscillatory ripple mark spacing and the nearbottom water orbital motions. *J. Sedimentary Petrology* 50:183-191.
- Heller, P. L., P. D. Komar and D. R. Pevear. 1980. Transport processes in ooid genesis. *J. Sedimentary Petrology* 50:943-952.
- Komar, P. D. 1980. Settling velocities of circular cylinders at low Reynolds numbers. *J. Geology* 88:327-336.
- Komar, P. D. 1980. K-type coefficients in the littoral drift system: variable or constant? *Marine Geology* 34:M99-M101.
- Komar, P. D. 1980. Modes of sediment transport in channelized water flows with ramifications to the erosion of the Martian outflow channels. *Icarus* 42:317-329.
- Baba, J. and P. D. Komar. 1981. Settling velocities of irregular grains at low Reynolds numbers. *J. Sedimentary Petrology* 51:121-128.
- Komar, P. D., A. P. Morse, L. F. Small and S. W. Fowler. 1981. An analysis of sinking rates of natural copepod and euphausiid fecal pellets. *Limnology and Oceanography* 26:172-180.
- Baba, J. and P. D. Komar. 1981. Measurements and analysis of settling velocities of natural quartz sand grains. *J. Sedimentary Petrology* 51:631-640.
- Komar, P. D. 1981. The applicability of the Gibbs equation for grain settling velocities to conditions other than quartz grains in water. *J. Sedimentary Petrology* 51:1125-1132.
- Miller, M. C. and P. D. Komar. 1981. Oscillation ripples--A reply. *J. Sedimentary Petrology* 51:678-679.
- Peterson, C., K. Scheidegger and P. Komar. 1982. Sand-dispersal patterns in an active-margin estuary of the northwestern United States as indicated by sand composition, texture and bedforms. *Marine Geology* 50:77-96.
- Komar, P. D. 1982. Reply in support of the Gibbs formulae. *J. Sedimentary Petrology* 52:1026.

- Fok-Pun, L. and P. D. Komar. 1983. Settling velocities of planktonic foraminifera: Density variations and shape effects. *Micropaleontology* 13:60-68.
- Komar, P. D. 1983. The shapes of streamlined islands on Earth and Mars: Experiments and analyses of the minimum-drag form. *Geology* 11:651-654.
- Cui, B., P. D. Komar and J. Baba. 1983. Settling velocities of natural sand grains in air. *J. Sedimentary Petrology* 53:1205-1221.
- Drake, E. T. and P. D. Komar. 1983. Speculations about the earth: The role of Robert Hooke and others in the 17th century. *History of Geology* 2:11-16.
- Komar, P. D., editor. 1983. *CRC Handbook of Coastal Processes and Erosion*. CRC Press, Boca Raton, Fla. 305 pp.
- Cui, B. and P. D. Komar. 1984. Size measures and the ellipsoidal form of clastic sediment particles. *J. Sedimentary Petrology*, 54:783-797.
- Komar, P. D. and B. Cui. 1984. The analysis of grain-size measurements by sieving and settling-tube techniques. *J. Sedimentary Petrology* 54:603-614.
- Komar, P. D. 1984. The lemniscate loop--Comparisons with the shape of streamlined landforms. *J. Geology* 92:133-145.
- Komar, P. D., J. Baba and B. Cui. 1984. Grain-size analyses of mica within sediments and its hydraulic equivalence. *J. Sedimentary Petrology* 54:1379-1391.
- Komar, P. D. and C. Wang. 1984. Processes of selective grain transport and the formation of placers on beaches. *J. Geology* 92:637-655.
- Drake, E. T. and P. D. Komar. 1984. Origin of impact craters: Ideas and experiments of Hooke, Gilbert, and Wegener. *Geology* 12:408-411.
- Komar, P. D. and G. L. Taghon. 1985. Analyses of the settling velocities of fecal pellets from the subtidal polychaete Amphicteis scaphobranchiata. *J. Marine Research* 43:605-614.
- Wang, C. and P. D. Komar. 1985. The sieving of heavy mineral sands. *J. Sedimentary Petrology* 55:479-482.
- Komar, P. D. 1985. The hydraulic interpretation of turbidites from their grain sizes and sedimentary structures. *Sedimentology* 32:395-407.

LAVERNE KULM

- Krissek, L. A., K. F. Scheidegger and L. D. Kulm. 1980. Surface sediments of the Peru-Chile continental margin and the Nazca Plate: Textural and geochemical characteristics and their controls. *Geological Soc. of America Bulletin* 91:321-331.
- Kulm, L. D., J. Dymond, E. J. Dasch and D. M. Hussong, editors. 1981. *Nazca Plate: Crustal Formation and Andean Convergence*. Geological Soc. of America Memoir No. 154. 824 pp.
- Woollard, G. P. and L. D. Kulm. 1981. History of the Nazca plate project. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 3-26.
- Kulm, L. D., H.-J. Schrader, J. M. Resig, T. M. Thornburg, A. Masias and L. Johnson. 1981. Late Cenozoic carbonates on the Peru continental margin: Lithostratigraphy, biostratigraphy, and tectonic history. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 469-507.

- Rosato, J. and L. D. Kulm. 1981. Clay mineralogy of the Peru continental margin and adjacent Nazca plate: Implications for provenance, sea level changes and continental accretion. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 545-568.
- Schweller, W. J., L. D. Kulm and R. A. Prince. 1981. Tectonics, structure and sedimentary framework of the Peru-Chile Trench. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 323-349.
- Kulm, L. D., R. A. Prince, W. French, S. Johnson and A. Masias. 1981. Crustal structure and tectonics of the central Peru margin and trench. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 445-468.
- Thornburg, T. and L. D. Kulm. 1981. Sedimentary basins of the Peru continental margin: Structure, stratigraphy, and Cenozoic tectonics from 6° to 16°S latitude. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir No. 154. p. 393-422.
- Suess, E., B. Carson, et al. including L. D. Kulm. 1985. Biological communities at vent sites along the subduction zone off Oregon. Biological Soc. Washington Bulletin 6:475-484.
- von Huene, R., L. D. Kulm and J. Miller. 1985. Structure of the frontal part of the Andean convergent margin. J. Geophysical Research 90(B7):5429-5442.

MITCHELL LYLE

- Einsele, G., J. M. Gieskes, et al. including M. Lyle. 1980. Intrusion of basaltic sills into highly porous sediments, and resulting hydrothermal activity. Nature 283:441-445.
- Schrader, H. et al. including M. Lyle. 1980. Laminated diatomaceous sediments from the Guaymas Basin slope (central Gulf of California): 250,000 year climate record. Science 207:1207-1209.
- Moore, W. S. et al. including M. W. Lyle. 1981. Fluxes of metals to a manganese nodule: Radiochemical, Chemical, Structural, and Mineralogical studies. Earth and Planetary Science Letters 52:151-171.
- Lyle, M. 1981. The formation and growth of ferromanganese oxides on the Nazca plate. In: Nazca Plate: Crustal Formation and Andean Convergence. L. D. Kulm, J. Dymond et al., editors, Geological Soc. of America Memoir 154:269-294.
- Lyle, M. 1982. Estimating growth rates of ferromanganese nodules from chemical compositions: implications for nodule formation processes. Geochimica et Cosmochimica Acta 46:2301-2306.
- Lyle, M. 1983. The brown-green color transition in marine sediments: a marker of the Fe(III)-Fe(II) redox boundary. Limnology and Oceanography 28:1026-1033.
- Finney, B., G. R. Heath, and M. Lyle. 1984. Growth rates of manganese-rich nodules at MANOP Site H (Eastern North Pacific). Geochimica et Cosmochimica Acta 48:911-919.

- Dymond, J., M. Lyle, B. Finney, D. Z. Piper, K. Murphy, R. Conard and N. Piasias. 1984. Ferromanganese nodules from MANOP sites H, S, and R--control of mineralogical and chemical composition by multiple accretionary processes. *Geochimica et Cosmochimica Acta* 48:931-949.
- Lyle, M., G. R. Heath and J. M. Robbins. 1984. Transport and release of transition elements during early diagenesis: sequential leaching of sediments from MANOP sites M and H: Part I, pH 5 acetic acid leach. *Geochimica Cosmochimica Acta* 48:1705-1715.
- Abbott, D. and M. Lyle. 1984. Age of oceanic plates at subduction and volatile recycling. *Geophysical Research Letters* 11:951-954.
- Dymond, J. and M. Lyle. 1985. Flux comparisons between sediments and sediment traps in the eastern tropical Pacific: Implications for atmospheric CO₂ variations during the Pleistocene. *Limnology and Oceanography* 30:699-712.

CURT PETERSON

- Peterson, C. D., K. F. Scheidegger and P. D. Komar. 1982. Sand dispersal patterns in an active-margin estuary of the northwestern United States as indicated by sand composition, texture, and bedforms. *Marine Geology* 50:77-96.
- Peterson, C. D., K. F. Scheidegger, W. Niem and P. D. Komar. 1983. Sediment composition and hydrography in six high-gradient estuaries of the northwestern United States. *J. Sedimentary Petrology* 54:86-97.
- Peterson, C. D., K. F. Scheidegger and H. J. Schrader. 1984. Holocene depositional evolution of a small active-margin estuary of the northwestern United States. *Marine Geology* 59:51-83.

NICKLAS PISIAS

- Piasias, N. G. 1983. Geologic time series from deep-sea sediments: Time scales and distortion by bioturbation. *Marine Geology* 51:99-113.
- Loutit, T. S., N. G. Piasias and J. P. Kennett. 1983. Pacific Miocene carbon isotope stratigraphy using benthic foraminifera. *Earth and Planetary Science Letters* 66:48-62.
- Leinen, M. and N. G. Piasias. 1984. An objective technique for determining end-member compositions and for partitioning sediments according to their sources. *Geochimica et Cosmochimica Acta* 48:47-62.
- Piasias, N. G., et al. 1984. High resolution stratigraphic correlation of benthic oxygen isotopic records spanning the last 300,000 years. *Marine Geology* 56:119-136.
- Dymond, J., M. Lyle, B. Finney, D. Piper, K. Murphy, R. Conard and N. G. Piasias. 1984. Ferromanganese nodules from MANOP Sites H, S, and R - Control of mineralogical and chemical composition by multiple accretionary processes. *Geochimica et Cosmochimica Acta* 48:931-949.
- Piasias, N. G. and N. J. Shackleton. 1984. Modelling the global climate response to orbital forcing and atmospheric carbon dioxide changes. *Nature* 310:757-759.
- Boyd, R. F., D. L. Clark et al. including N. G. Piasias. 1984. Central Arctic Ocean response to Pleistocene earth-orbital variations. *Quaternary Research* 22:121-128.

KENNETH SCHEIDEGGER

- Kulm, L. D. and K. F. Scheidegger. 1979. Quaternary sedimentation on the tectonically active Oregon continental slope. In: *Geology of Continental Slopes*, L. J. Doyle and O. H. Pilkey, editors. Soc. Economic Paleontologists and Mineralogists, Special Publication No. 27. p. 247-263.
- Rea, D. K. and K. F. Scheidegger. 1979. Eastern Pacific spreading rate fluctuation and its relation to Pacific area volcanic episodes. *J. Volcanology and Geothermal Research* 5:135-148.
- Krissek, L. A., K. F. Scheidegger and L. D. Kulm. 1980. Surface sediments of the Peru-Chile continental margin and Nazca Plate. *Geological Soc. of America Bulletin* 91:321-331.
- Scheidegger, K. F., J. B. Corliss, P. A. Jezek and D. Ninkovich. 1980. Compositions of deep-sea ash layers derived from North Pacific volcanic arcs: Variations in time space. *J. Volcanology and Geothermal Res.* 7:107-137.
- Stakes, D. S. and K. F. Scheidegger. 1981. Temporal variations in secondary minerals from Nazca Plate basalts. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir 154. p. 109-130.
- Scheidegger, K. F. and J. B. Corliss. 1981. Petrogenesis and secondary alteration of upper layer 2 basalts of the Nazca Plate. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. Geological Soc. of America Memoir 154. p. 77-107.
- Scheidegger, K. F. and L. A. Krissek. 1982. Dispersal and deposition of eolian and fluvial sediments off Peru and northern Chile. *Geological Soc. of America Bulletin* 93:150-162.
- Scheidegger, K. F., A. Federman and A. Tallman. 1982. Compositional heterogeneity of tephra from the 1980 eruptions of Mount St. Helens. *J. Geophysical Research* 87(B13):10,861-10,881.
- Peterson, C., K. F. Scheidegger and P. D. Komar. 1982. Sand-dispersal patterns in an active-margin estuary of the northwestern United States as indicated by sand composition, texture and bedforms. *Marine Geology* 50:77-96.
- Scheidegger, K. F. and L. A. Krissek. 1983. Zooplankton and nekton: Natural barriers to the seaward transport of suspended terrigenous particles off Peru. In: *Suess, E. and J. Thiede, eds., Coastal Upwelling: Its Sediment Record*, Pt. A, Plenum Press, New York. p. 303-333.
- Krissek, L. and K. F. Scheidegger. 1983. Environmental controls on sediment texture and composition in low oxygen zones off Peru and Oregon. In: *J. Thiede and E. Suess, editors, Coastal Upwelling: Its Sediment Record*, Pt. B. Plenum Press, New York. p. 163-180.
- Peterson, C., K. F. Scheidegger, W. Niem and P. Komar. 1983. Sediment composition and hydrography in six high-gradient estuaries of the northwestern United States. *J. Sedimentary Petrology* 54:86-97.
- Peterson, C., K. F. Scheidegger and H. Schrader. 1984. Holocene depositional evolution of a small active-margin estuary of the northwestern United States. *Marine Geology* 59:51-83.
- Federman, A. N. and K. F. Scheidegger. 1984. Significance of compositional heterogeneity of distal tephra deposits from the 1912 eruption in Novarupta, Alaska. *J. Volcanology and Geothermal Research* 21:233-254.

- Schuette, G. and H. J. Schrader. 1979. Diatom taphocoenoses in the coastal upwelling area off western South America. *Nova Hedwigia Beiheft* 64:359-378.
- Diester-Haass, L. and H. J. Schrader. 1979. Neogene coastal upwelling history off Northwest and Southwest Africa. *Marine Geology* 29:39-53.
- Schrader, H. J. 1979. Opal phytoplankton in DSDP 49 samples. In: Luyendyk, B., J. Cann et al., editors, *Initial Reports DSDP, 49*, Washington (U.S. Govt. Printing Office), 589-593.
- Poore, R. Z., J. C. Steinmetz and H. J. Schrader. 1979. Biostratigraphic summary of DSDP Leg 49. In: Luyendyk, B., J. Cann et al., editors, *Initial Reports DSDP, 49*, Washington (U.S. Govt. Printing Office) 11:851-858.
- Schrader, H. J. et al. 1980. Laminated diatomaceous sediments from the Guaymas Basin slope (central Gulf of California): 250,000-year climate record. *Science* 207:1207-1209.
- Einsele, G., J. M. Gieskes et al., including H. J. Schrader. 1980. Intrusion of basaltic sills into highly porous sediments, and resulting hydrothermal activity. *Nature* 283:441-445.
- DeVries, T. and H. J. Schrader. 1981. Variation of upwelling/oceanic conditions during the latest Pleistocene through Holocene off the central Peruvian coast: A diatom record. *Marine Micropaleontology* 6:157-167.
- Schuette, G. and H. J. Schrader. 1981. Diatom taphocoenoses in the coastal upwelling area off South West Africa. *Marine Micropaleontology* 6:131-155.
- Kulm, L. D., H. J. Schrader, J. Resig, T. Thornburg, A. Masias and L. Johnson. 1981. Late Cenozoic carbonates on the Peru continental Margin: Lithostratigraphy, biostratigraphy, and tectonic history. In: Nazca Plate: Crustal Formation and Andean Convergence, L. D. Kulm et al., editors. *Geological Soc. of America Memoir* 154, p. 469-507.
- Schrader, H. J. and G. Schuette. 1981. Marine diatoms. In: *The Sea*, vol. 7, *The Oceanic Lithosphere*, C. Emiliani, editor. John Wiley and Sons, p. 1179-1232.
- Schuette, G. and H. J. Schrader. 1981. Diatoms in surface sediments: A reflection of coastal upwelling. In: *Coastal Upwelling*, F. A. Richards, editor. p. 372-380.
- Schrader, H. J. and A. Matherne. 1981. Sapropel formation in the eastern Mediterranean Sea: Evidence from preserved opal assemblages. *Micropaleontology* 27:191-203.
- Schuette, G. and H. J. Schrader. 1982. Thalassiothrix pseudonitzschoides spec. nov.: A common pennate diatom from the Gulf of California. *Bacillaria* 5:213-223.
- Donegan, D. and H. J. Schrader. 1982. Biogenic and abiogenic components of laminated hemipelagic sediments in the central Gulf of California. *Marine Geology* 48:215-237.
- Crawford, S. and H. J. Schrader. 1982. Microfossil distribution in coarse fraction (>150 μ m) analysis of Deep Sea Drilling Project Site 480, central Gulf of California: Preliminary results. In: Curray, J., D. Moore et al., editors, *Initial Report DSDP, 64*, Pt. 2, Washington (U.S. Govt. Printing Office), 1245-1249.
- Schrader, H. J. 1982. Diatom biostratigraphy and laminated diatomaceous sediments from the Gulf of California Deep Sea Drilling Project Leg 64. In: Curray, J., D. Moore et al., editors, *Initial Reports DSDP, 64*, Pt. 2, Washington (U.S. Govt. Printing Office), 973-981.

- Murray, D. and H. J. Schrader. 1982. The size distribution of the centric diatom Coscinodiscus nodulifer, Site 480, Guaymas Basin slope, Gulf of California. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64, Pt. 2, Washington (U.S. Govt. Printing Office), 1239-1244.
- Aubry, M.-P., Y. Matoba, A. Molina-Cruz and H. J. Schrader. 1982. Synthesis of Leg 64 biostratigraphy. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64, Washington (U.S. Govt. Printing Office), 1057-1064.
- Curray, J. R. and D. G. Moore and shipboard Scientific Party. 1982. Baja California Passive Margin Transect: Sites 474, 475, and 476 (p. 35-210); Guaymas Basin: Sites 477, 478, and 481 (p. 211-415); Guaymas Basin Slope: Sites 479 and 480 (p. 417-504). In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64, Washington (U.S. Govt. Printing Office).
- Schrader, H. and T. Baumgartner. 1983. Decadal variation of upwelling in the central Gulf of California. In: J. Thiede and E. Suess, editors, Coastal Upwelling, Its Sediment Record, Part B, Plenum Press, New York. p. 247-276.
- Juillet, A., L. Labeyrie and H. Schrader. 1983. Oxygen isotope composition of diatom silica and silicoflagellate assemblage changes in the Gulf of California. A 700-year upwelling study. In: J. Thiede and E. Suess, editors, Coastal Upwelling, Its Sediment Record, Part B, Plenum Press, New York-London. p. 277-293.
- Murray, D. and H. Schrader. 1983. Distribution of silicoflagellates in plankton and core top samples from the Gulf of California. Marine Micropaleontology 7:517-539.
- Thayer, V. L., T. C. Johnson and H. Schrader. 1983. Distribution of diatoms in Lake Superior sediments. J. Great Lakes Research 9:497-507.
- Thayer, V. L., T. C. Johnson and H. Schrader. 1983. A preliminary study of diatom stratigraphy in Lake Superior sediments. J. Great Lakes Research 9:508-516.
- Peterson, C., K. Scheidegger and H. Schrader. 1984. Holocene depositional evolution of a small active-margin estuary of the northwestern United States. Marine Geology 59:51-83.
- Gersonde, R. and H. Schrader. 1984. Marine planktic diatom correlation of lower Messinian deposits in the western Mediterranean. Marine Micropaleontology 9:93-110.
- Baumgartner, T., V. Ferreira-Bartina, H. Schrader and A. Soutar. 1985. A 20-year varve record of siliceous phytoplankton variability in the central Gulf of California. Marine Geology 64:113-129.
- Whiting, M. C. and H. Schrader. 1985. Actinocyclus ingens Rattray: Reinvestigation of a polymorphic species. Micropaleontology 31:68-75.
- Schrader, H. J. and D. K. Rea. 1985. Late pliocene onset of glaciation: ice-rafting and diatom stratigraphy of North Pacific DSDP cores. Palaeogeography, palaeoclimatology, palaeoecology 49:313-325.

ERWIN SUESS

- Suess, E. 1979. Mineral phases formed in anoxic sediments by microbial decomposition of organic matter. Geochimica et Cosmochimica Acta 43:339-352.
- Müller, P. J. and E. Suess. 1979. Productivity, sedimentation rate and sedimentary organic matter in the oceans, I. Organic carbon preservation. Deep-Sea Research 26A:1347-1362.

- Suess, E., P. J. Müller, H. S. Powell and C. E. Reimers. 1980. A closer look at nitrification in pelagic sediments. *Geochemical J.* 14:129-137.
- Suess, E. 1980. Particulate organic carbon flux in the oceans - surface productivity and oxygen utilization. *Nature* 288:260-263.
- Suess, E. 1981. Phosphate regeneration from sediments of the Peru Continental margin by dissolution of fish debris. *Geochimica et Cosmochimica Acta* 45:577-588.
- Suess, E. and C. A. Ungerer. 1981. Element and phase composition of particulate matter from the circumpolar current between New Zealand and Antarctica. *Oceanologica Acta* 4:151-160.
- Suess, E., W. Balzer, K.-F. Hesse, P. J. Müller, C. A. Ungerer and G. Wefer. 1982. Calcium carbonate hexahydrate from organic-rich sediments of the Antarctic shelf: Precursors of glendonites. *Science* 216:1128-1131.
- Wefer, G., E. Suess, W. Balzer, G. Liebezeit, P. J. Müller, C. A. Ungerer and W. Zenk. 1982. Fluxes of biogenic components from sediment trap deployment in circumpolar waters of the Drake Passage. *Nature* 299:145-147.
- Suess, E. and J. Thiede. 1982. In Portugal: Reviewing upwelling and sediments. *Geotimes* 27(11):24-27.
- Hesse, K.-F., J. Küppers and E. Suess. 1983. Refinement of the structure of Ikaite, $\text{CaCO}_3 \cdot 6\text{H}_2\text{O}$. *Z. Kristallographie* 163:227-231.
- Reimers, C. E. and E. Suess. 1983. Late Quaternary fluctuations in the cycling of organic matter off central Peru: A proto-kerogen record. In: E. Suess and J. Thiede, editors, *Coastal Upwelling: Its Sediment Record*, Pt. A, Plenum Press, New York. pp. 497-526.
- Reimers, C. E. and E. Suess. 1983. Spatial and temporal patterns of organic matter accumulation on the Peru continental margin. In: J. Thiede and E. Suess, editors, *Coastal Upwelling: Its Sediment Record*, Pt. B, Plenum Press, New York. pp. 311-345.
- Reimers, C. E. and E. Suess. 1983. Partitioning of organic carbon fluxes and sedimentary organic matter decomposition rates in the ocean. *Marine Chemistry* 13:141-168.
- Weliky, K., E. Suess, C. A. Ungerer, P. J. Müller and K. Fischer. 1983. Problems with accurate carbon measurements in marine sediments and particulate matter in seawater: A new approach. *Limnology and Oceanography* 28:1252-1259.
- Wefer, G., R. B. Dunbar and E. Suess. 1983. Stable isotopes in foraminifers off Peru recording high fertility and changes in upwelling. In: J. Thiede and E. Suess, editors. *Coastal Upwelling: Its Sediment Record*, Pt. B, Plenum Press, New York. pp. 295-308.
- Suess, E. and J. Thiede, editors. 1983. *Coastal Upwelling: Its Sediment Record*, Pt. A: Responses of the Sedimentary Regime to Coastal Upwelling. Plenum Press, New York. 594 pp.
- Thiede, J. and E. Suess, editors. 1983. *Coastal Upwelling: Its Sediment Record*, Pt. B: Sedimentary Records of Ancient Coastal Upwelling. Plenum Press, New York. 604 pp.
- Whiticar, M. J., E. Suess and H. Wehner. 1985. Thermogenic hydrocarbons in surface sediments of the Bransfield Strait, Antarctic Peninsula. *Nature* 314:87-90.
- Suess, E. B. Carson, et al. 1985. Biological communities at vent sites along the subduction zone off Oregon. *Biological Soc. Washington Bulletin* 6:475-484.

II. RESEARCH ASSISTANTS AND STUDENTS

JUMPEI BABA

- Baba, J. and P. D. Komar. 1981. Settling velocities of irregular grains at low Reynolds numbers. *J. Sedimentary Petrology* 51:121-127.
- Baba, J. and P. D. Komar. 1981. Measurements and analysis of settling velocities of natural quartz sand grains. *J. Sedimentary Petrology* 51:631-640.
- Cui, B., P. D. Komar and J. Baba. 1983. Settling velocities of natural sand grains in air. *J. Sedimentary Petrology* 53:1205-1221.

NANCY BREWSTER

- Brewster, N. A. 1980. Cenozoic biogenic silica sedimentation in the Antarctic Ocean. *Geological Soc. America Bulletin*. 91 pt I: 337-347.

WILLIAM BUSCH

- Busch, W. and G. H. Keller. 1981. The physical properties of Peru-Chile continental margin sediments - the influence of coastal upwelling on sediment properties. *J. Sedimentary Petrology* 51:705-719.
- Busch, W. and G. H. Keller. 1982. Consolidation characteristics of sediments from the Peru-Chile continental margin and implications for past sediment instability. *Marine Geology* 45:17-39.
- Busch, W. and G. H. Keller. 1983. Analysis of sediment stability on the Peru-Chile continental slope. *Marine Geotechnology* 5:181-211.

RICHARD COBLER

- Dymond, J., J. B. Corliss, R. Cobler, C. Muratli, C. Chou and R. Conard. 1980. Composition and origin of sediments recovered by deep drilling of sediment mounds, Galapagos Spreading Center. In: Rosendahl, B., R. Hekinian et al., editors, *Initial Reports DSDP, 54*, Washington (U.S. Govt. Printing Office), 377-386.
- Cobler, R. and J. Dymond. 1980. Sediment trap experiment on the Galapagos Spreading Center, Equatorial Pacific. *Science* 209:801-803.
- Dymond, J., K. Fischer, M. Clauson, R. Cobler, W. Gardner, M. J. Richardson, W. Berger, A. Soutar and R. Dunbar. 1981. A sediment trap intercomparison study in the Santa Barbara Basin. *Earth and Planetary Science Letters* 53:409-418.
- Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variation in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors. *Coastal Upwelling: Its Sediment Record, Part A*. Plenum Press, New York. p. 209-224.
- Dymond, J., R. Cobler, L. Gordon, P. Biscaye and G. Mathieu. 1983. ^{226}Ra and ^{222}Rn contents of Galapagos Rift hydrothermal waters: The importance of low temperature interactions with crustal rocks. *Earth and Planetary Science Letters* 64:417-429.

BOBBI CONARD

- Dymond, J., J. B. Corliss, R. Cobler, C. Muratli, C. Chou and R. Conard. 1980. Composition and origin of sediments recovered by deep drilling of sediment mounds, Galapagos Spreading Center. In: Rosendahl, B., R. Hekinian et al., editors, Initial Reports DSDP, 54, Washington (U.S. Govt. Printing Office), 377-386.
- Dymond, J., M. Lyle, B. Finney, D. Z. Piper, K. Murphy, R. Conard and N. Pisias. 1984. Ferromanganese nodules from MANOP sites H, S, and R--Control of mineralogical and chemical composition by multiple accretionary processes. *Geochimica et Cosmochimica Acta* 48:931-949.

MILO CLAUSON

- Dymond, J., K. Fischer, M. Clauson, et al. 1981. A sediment trap inter-comparison study in the Santa Barbara Basin. *Earth and Planetary Science Letters* 53:409-418.

THOMAS DEVRIES

- DeVries, T. and H. J. Schrader. 1981. Variation of upwelling/oceanic conditions during the latest Pleistocene through Holocene off the central Peruvian coast: A diatom record. *Marine Micropaleontology* 6:157-167.
- Froelich, P. N., M. L. Bender, N. A. Luedtke, G. R. Heath and T. DeVries. 1982. The marine phosphorous cycle. *American J. of Science* 282:474-511.
- DeVries, T. J. and W. G. Percy. 1982. Fish debris in sediments of the upwelling zone off central Peru: a late Quarternary record. *Deep-Sea Research* 29:87-109.

DAVID DONEGAN

- Donegan, D. and H. J. Schrader. 1982. Biogenic and abiogenic components of laminated hemipelagic sediments in the central Gulf of California. *Marine Geology* 48:215-237.

CHRISTINA EMERICK

- Emerick, C. M. and R. A. Duncan. 1982. Age progressive volcanism in the Comores Archipelago, Western Indian Ocean and implications for Somali Plate tectonics. *Earth and Planetary Science Letters* 60:415-428.

ALAN FEDERMAN

- Scheidegger, K. F., A. Federman and A. Tallman. 1982. Compositional heterogeneity of tephtras from the 1980 eruptions of Mount St. Helens. *J. Geophysical Research* 87(B13):10,861-10,881.
- Federman, A. N. and K. F. Scheidegger. 1984. Significance of compositional heterogeneity of distal tephra deposits from the 1912 eruption in Novarupta, Alaska. *J. Volcanology and Geothermal Research*, 21:233-254.

BRUCE FINNEY

Finney, B., G. R. Heath and M. Lyle. 1984. Growth rates of manganese-rich nodules at MANOP site H (Eastern North Pacific). *Geochimica et Cosmochimica Acta* 48:911-919.

Dymond, J., M. Lyle, B. Finney, D. Z. Piper, K. Murphy, R. Conard and N. Pisias. 1984. Ferromanganese nodules from MANOP sites H, S, and R--Control of mineralogical and chemical composition by multiple accretionary processes. *Geochimica et Cosmochimica Acta* 48:931-949.

KATHLEEN FISCHER

Dymond, J., K. Fischer, et al. 1981. A sediment trap intercomparison study in the Santa Barbara Basin. *Earth and Planetary Science Letters* 53:409-418.

Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variations in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors. *Coastal Upwelling: Its Sediment Record*, Pt. A. Plenum Press, New York. pp. 209-224.

Weliky, K., E. Suess, C. A. Ungerer, P. Mueller and K. Fischer. 1983. Problems with accurate carbon measurements in marine sediments and water column particulates: A new approach. *Limnology and Oceanography* 28:1252-1259.

Emerson, S., K. Fischer, C. Reimers and D. Heggie. 1985. Organic carbon dynamics and preservation in deep-sea sediments. *Deep-Sea Research* 32:1-21.

LUIS FOK-PUN

Fok-Pun, L. and P. D. Komar. 1983. Settling velocities of planktonic foraminifera: Density variations and shape effects. *Micropaleontology* 13:60-68.

SARAH HOFFMAN

Corliss, J. B., J. A. Baross and S. E. Hoffman. 1981. An hypothesis concerning the relationship between submarine hot springs and the origin of life on earth. *Oceanologica Acta* SP:59-69.

Abbott, D. H. and S. E. Hoffman, 1984. Archaean plate tectonics revisited. Part I: Heat flow, spreading rate, and the age of subducting oceanic lithosphere and their effects on the origin and evolution of continents. *Tectonics* 3:429-448.

LAWRENCE KRISSEK

- Krissek, L. A., K. F. Scheidegger and L. D. Kulm. 1980. Surface sediments of the Peru-Chile continental margin and the Nazca Plate: Geological Soc. of America Bulletin, 91:321-331.
- Scheidegger, K. F. and L. A. Krissek. 1982. Dispersal and deposition of eolian and fluvial sediments off Peru and northern Chile. Geological Soc. of America Bulletin, 93:150-162.
- Krissek, L. and K. F. Scheidegger. 1982. Environmental controls on sediment texture and composition in low oxygen zones off Peru and Oregon. In: E. Suess and J. Thiede, eds., Coastal Upwelling: Its Sediment Record, Pt. B. Plenum Press, New York. p. 163-180.
- Scheidegger, K. F. and L. A. Krissek. 1983. Zooplankton and nekton: Natural barriers to the seaward transport of suspended terrigenous particles off Peru. In: E. Suess and J. Thiede, eds., Coastal Upwelling: Its Sediment Record, Pt. A. Plenum Press, New York. p. 303-333.

MARGARET LEINEN

- Leinen, M. and N. G. Pisias. 1984. An objective technique for determining end-member compositions and for partitioned sediments according to their sources. *Geochimica et Cosmochimica Acta* 48:47-62.

PAUL LOUBERE

- Loubere, P. 1981. Oceanographic parameters reflected in the seabed distribution of planktonic foraminifera from the North Atlantic and Mediterranean Sea. *J. Foraminiferal Research* 11:137-158.

ANNE MATHERNE

- Schrader, H. J. and A. Matherne. 1981. Sapropel formation in the eastern Mediterranean Sea: Evidence from preserved opal assemblages. *Micropaleontology* 27:191-203.
- Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variations in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors. *Coastal Upwelling: Its Sediment Record*, v. 1. Plenum Press, New York. pp. 209-224.

ALAN MORSE

- Komar, P. D., A. P. Morse, L. F. Small and S. W. Fowler. 1981. An analysis of sinking rates of natural copepod and euphausiid fecal pellets. *Limnology and Oceanography* 26:172-180.

CHRIS MOSER

- Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variations in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors. Coastal Upwelling: Its Sediment Record, v. 1. Plenum Press, New York. pp. 209-224.

KIM MURPHY

- Murphy, K. and J. Dymond. 1984. Rare earth element fluxes and geochemical budget in the Eastern Equatorial Pacific. Nature 307:444-447.
- Dymond, J., M. Lyle, B. Finney, D. Z. Piper, K. Murphy, R. Conard and N. Pisiias. 1984. Ferromanganese nodules from MANOP sites H, S, and R--Control of mineralogical and chemical composition by multiple accretionary processes. Geochimica et Cosmochimica Acta 48:931-949.

DAVID MURRAY

- Murray, D. and H. J. Schrader. 1982. The size distribution of the centric diatom Coscinodiscus nodulifer, Site 480, Guaymas Basin slope, Gulf of California. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64, Pt. 2, Washington (U.S. Govt. Printing Office) 1239-1244.
- Fischer, K., J. Dymond, C. Moser, D. Murray and A. Matherne. 1983. Seasonal variations in particulate flux in an offshore area adjacent to coastal upwelling. In: E. Suess and J. Thiede, editors. Coastal Upwelling: Its Sediment Record, v. 1. Plenum Press, New York. pp. 209-224.
- Murray, D. and H. Schrader. 1983. Distribution of silicoflagellates in plankton and core top samples from the Gulf of California. Marine Micropaleontology 7:517-539.

HEIDI POWELL

- Suess, E., P. J. Müller, H. S. Powell and C. E. Reimers. 1980. A closer look at nitrification in pelagic sediments. Geochemical J. 14:129-137.

CLARE REIMERS

- Reimers, C. E. and P. D. Komar. 1979. Evidence for explosive volcanic density currents on certain Martian volcanoes. Icarus 39:88-110.
- Suess, E., P. J. Müller, H. S. Powell and C. E. Reimers. 1980. A closer look at nitrification in pelagic sediments. Geochemical J. 14:129-137.
- Reimers, C. E. 1982. Organic matter in anoxic sediments off Central Peru: relations of porosity, microbial decomposition and deformation properties. Marine Geology 46:175-197.
- Reimers, C. E. and E. Suess. 1983. Proto-kerogen record under fluctuating oxygen conditions from the upwelling region off Peru during the Late Quaternary. In: E. Suess and J. Thiede, eds. Coastal Upwelling: Its Sediment Records, Pt. A. Plenum Press, New York. pp. 497-526.
- Reimers, C. E. and E. Suess. 1983. Spatial and temporal patterns of organic matter accumulation on the Peru continental margin. In: J. Thiede and E. Suess, editors, Coastal Upwelling: Its Sediment Record, Pt. B, Plenum Press, New York. pp. 311-345.

Reimers, C. E. and E. Suess. 1983. Partitioning of organic carbon fluxes and sedimentary organic matter decomposition rates in the oceans. *Marine Chemistry* 13:141-168.

CONSTANCE SANCETTA

Sancetta, C. 1979. Oceanography of the North Pacific during the last 18,000 years: evidence from fossil diatoms. *Marine Micropaleontology* 4:103-123.

GRETCHEN SCHUETTE

Schuette, G. and H. J. Schrader. 1979. Diatom taphocoenoses in the coastal upwelling area off western South America. *Nova Hedwigia Beiheft* 64:359-378.

Schuette, G. and H. J. Schrader. 1981. Diatom taphocoenoses in the coastal upwelling area off South West Africa. *Marine Micropaleontology* 6:131-155.

Schrader, H. J. and G. Schuette. 1981. Marine diatoms. In: *The Sea*, v. 7, *The Oceanic Lithosphere*, C. Emiliani, editor. John Wiley and Sons p. 1179-1232.

Schuette, G. and H. J. Schrader. 1981. Diatoms in surface sediments: A reflection of coastal upwelling. In: *Coastal Upwelling*, F. A. Richards, editor. American Geophysical Union. p. 372-380.

Schuette, G. and H. J. Schrader. 1982. Thalassiothrix pseudonitzschioides spec. nov.: A common pennate diatom from the Gulf of California. *Bacillaria* 5:213-223.

DEBRA STAKES

Leinen, M. and D. Stakes. 1979. Metal accumulation rates in the central equatorial Pacific during the Cenozoic. *Geological Soc. America Bull.*, Part I, 90:357-375.

Stakes, D. S. and K. F. Scheidegger. 1981. Temporal variations in secondary minerals from Nazca Plate basalts. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. *Geological Soc. of America Memoir* 154. p. 109-130.

TODD THORNBURG

Thornburg, T. and L. D. Kulm. 1981. Sedimentary basins of the Peru continental margin: Structure, stratigraphy, and Cenozoic tectonics from 6° to 16°S latitude. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, editors. *Geological Soc. of America Memoir* No. 154. p. 393-422.

Kulm, L. D., H. J. Schrader, J. Resig, T. Thornburg, A. Masias and L. Johnson. 1981. Late Cenozoic carbonates on the Peru continental Margin: Lithostratigraphy, biostratigraphy, and tectonic history. In: *Nazca Plate: Crustal Formation and Andean Convergence*, L. D. Kulm et al., editors. *Geological Soc. of America Memoir* 154, p. 469-507.

JOHN TOTH

Toth, J. R. 1980. Deposition of submarine crusts rich in manganese and iron. Geological Soc. American Bulletin. v. 91 pt 1:44-54.

ANDY UNGERER

Suess, E. and C. A. Ungerer. 1981. Element and phase composition of particulate matter from the circumpolar current between New Zealand and Antarctica. Oceanologica Acta 4:151-160.

Suess, E., W. Balzer, K.-F. Hesse, P. J. Müller, C. A. Ungerer and G. Wefer. 1982. Calcium carbonate hexahydrate from organic-rich sediments of the Antarctic shelf: Precursors of glendonites. Science 216:1128-1131.

Wefer, G., E. Suess, W. Balzer, G. Liebezeit, P. J. Müller, C. A. Ungerer and W. Zenk. 1982. Fluxes of biogenic components from sediment trap deployment in circumpolar waters of the Drake Passage. Nature 299:145-147.

Weliky, K., E. Suess, C. A. Ungerer, P. J. Müller and K. Fischer. 1983. Problems with accurate carbon measurements in marine sediments and particulate matter in seawater: A New Approach. Limnology and Oceanography 28:1252-1259.

KAREN WELIKY

Weliky, K., E. Suess, C. A. Ungerer, P. J. Müller and K. Fischer. 1983. Problems with accurate carbon measurements in marine sediments and particulate matter in seawater: A new approach. Limnology and Oceanography 28:1252-1259.

PHYSICAL OCEANOGRAPHY

I. FACULTY

JOHN S. ALLEN

- Martell, C. M. and J. S. Allen. 1979. The generation of continental shelf waves by alongshore variations in bottom topography. *J. Physical Oceanography* 9:696-711.
- Grimshaw, R. and J. S. Allen. 1979. Linearly coupled, slowly varying oscillators. *Studies in Applied Mathematics* 66:51-71.
- Allen, J. S. 1980. Models of wind-driven currents on the continental shelf. *Annual Review Fluid Mechanics* 12:389-433.
- Allen, J. S. and R. D. Romea. 1980. On coastal trapped waves at low latitudes in a stratified ocean. *J. Fluid Mechanics* 98:555-585.
- Enfield, D. B. and J. S. Allen. 1980. On the structure and dynamics of monthly mean sea level anomalies along the Pacific coast of North and South America. *J. Physical Oceanography* 10:557-578.
- Allen, J. S. and R. L. Smith. 1981. On the dynamics of wind-driven shelf currents. *Philosophical Trans. Royal Soc. London A* 302:617-634.
- Romea, R. D. and J. S. Allen. 1982. On forced coastal trapped waves at low latitudes in a stratified ocean. *J. Marine Research* 40:369-401.
- Grimshaw, R. and J. S. Allen. 1982. The effect of dissipation on linearly coupled, slowly varying oscillators. *Studies in Applied Mathematics* 67:169-198.
- Denbo, D. W. and J. S. Allen. 1983. Mean flow generation on a continental margin by periodic wind forcing. *J. Physical Oceanography* 13:78-92.
- Allen, J. S., R. C. Beardsley, J. O. Blanton, et al., 1983. Physical oceanography of continental shelves. *Reviews of Geophysics and Space Physics* 21:1149-1181.
- Enfield, D. B. and J. S. Allen. 1983. The generation and propagation of sea level variability along the Pacific coast of Mexico. *J. Physical Oceanography* 13:1012-1033.
- Romea, R. D. and J. S. Allen. 1983. On vertically propagating coastal Kelvin waves at low latitudes. *J. Physical Oceanography* 13:1241-1254.
- Denbo, D. W. and J. S. Allen. 1984. Rotary empirical orthogonal function analysis of currents near the Oregon coast. *J. Physical Oceanography* 14:35-46.
- Allen, J. S. and D. W. Denbo. 1984. Statistical characteristics of large-scale response of coastal sea level to atmospheric forcing. *J. Physical Oceanography* 14:1079-1094.
- Allen, J. S. 1984. A simple model for stratified shelf flow fields with bottom friction. *J. Physical Oceanography* 14:1200-1214.
- Romea, R. D., J. S. Allen. 1984. The effect of friction and topography on coastal internal Kelvin waves at low latitudes. *Tellus* 36A:384-400.
- Halliwel, G. R., Jr. and J. S. Allen. 1984. Large-scale sea level response to atmospheric forcing along the west coast of North America, Summer 1973. *J. Physical Oceanography* 14:864-886.

KENNETH BRINK

- Brink, K. H. 1980. Propagation of barotropic continental shelf waves over irregular bottom topography. *J. Physical Oceanography* 10:765-778.
- Brink, K. H., D. Halpern and R. L. Smith. 1980. Circulation in the Peruvian upwelling system near 15°S. *J. Geophysical Research* 85(C7):4036-4048.

WAYNE V. BURT

- Trump, C. and W. V. Burt. 1981. Wintertime current meter measurements in the East China Sea. *J. Physical Oceanography* 11:1300-1306.
- Trump, C., S. Neshyba and W. V. Burt. 1982. Effects of mesoscale atmospheric convection cells on waters of the East China Sea. *Boundary-Layer Meteorology* 24:15-34.
- Ishida, H., W. V. Burt and Y. Mitsuta. 1984. Effects of mesoscale convective cells on the surface wind fields over the ocean. *Boundary Layer Meteorology* 29:75-84.

DOUGLAS CALDWELL

- Caldwell, D. R. and T. M. Chriss. 1979. The viscous sublayer at the sea floor. *Science* 205:1131-1132.
- Dillon, T. M. and D. R. Caldwell. 1980. High frequency internal waves at Ocean Station P. *J. Geophysical Research* 85:3277-3284.
- Caldwell, D. R. and S. A. Eide. 1980. Adiabatic gradient and potential temperature correction in pure and saline water: an experimental determination. *Deep-Sea Research* 27A:71-78.
- Dillon, T. M. and D. R. Caldwell. 1980. The Batchelor spectrum and dissipation in the upper ocean. *J. Geophysical Research* 85(C4):1910-1916.
- Caldwell, D. R., T. M. Dillon, J. M. Brubaker, P. A. Newberger and C. A. Paulson. 1980. The scaling of vertical temperature-gradient spectra. *J. Geophysical Research* 85(C4):1917-1924.
- Newberger, P. A. and D. R. Caldwell. 1981. Mixing and the bottom nepheloid layer. *Marine Geology* 41:321-336.
- Caldwell, D. R., T. M. Chriss, P. A. Newberger and T. M. Dillon. 1981. The thinness of oceanic temperature gradients. *J. Geophysical Research* 86(C5):4290-4292.
- Newberger, P. A. and D. R. Caldwell. 1981. An inertial subrange in microstructure spectra. *J. Geophysical Research* 86(C5):4265-4268.
- Dillon, T. M. and D. R. Caldwell. 1981. Comments on "Signatures of Mixing from the Bermuda Slope, the Sargasso Sea, and the Gulf Stream." *J. Physical Oceanography* 11:1435-1437.
- Caldwell, D. R. and S. A. Eide. 1981. Soret coefficient and isothermal diffusivity of aqueous solutions of five principal salt constituents of sea water. *Deep-Sea Research* 28A:1605-1618.
- Chriss, T. M. and D. R. Caldwell. 1982. Evidence for the influence of form drag on bottom boundary layer flow. *J. Geophysical Research* 87(C6):4148-4154.
- Caldwell, D. R. 1983. Oceanic turbulence: Big bangs or continuous creation? *J. Geophysical Research* 88(C12):7543-7550.
- Caldwell, D. R. 1983. Small-scale physics of the ocean. *Reviews of Geophysics and Space Physics* 21:1192-1205.

- Chriss, T. M. and D. R. Caldwell. 1984. Universal similarity and the thickness of the viscous sublayer at the ocean floor. *J. Geophysical Research* 89(C4):6403-6414.
- Chriss, T. M. and D. R. Caldwell. 1984. Turbulence spectra from the viscous sublayer and buffer layer at the ocean floor. *J. Fluid Mechanics* 142:39-55.
- Caldwell, D. R. and S. A. Eide. 1985. Separation of seawater by Soret diffusion. *Deep-Sea Research* 32:965-982.
- Caldwell, D. R., T. M. Dillon and J. N. Moum. 1985. The Rapid-Sampling Vertical Profiler: An evaluation. *J. Atmospheric and Oceanic Technology* 2:615-625.
- Moum, J. N. and D. R. Caldwell. 1985. Local influences on shear-flow turbulence in the equatorial ocean. *Science* 230:315-316.

DUDLEY CHELTON

- Chelton, D. B. 1984. Seasonal variability of alongshore geostrophic velocity off central California. *J. Geophysical Research* 89:3473-3486.
- Fu, L.-L. and D. B. Chelton. 1984. Temporal variability of the Antarctic Circumpolar Current observed from satellite altimetry. *Science* 226:343-346.
- Chelton, D. B. and P. J. McCabe. 1985. A review of satellite altimeter measurement of sea surface wind speed: With a proposed new algorithm. *J. Geophysical Research* 90(C3):4707-4720.
- Fu, L.-L. and D. B. Chelton. 1985. Observing large-scale temporal variability of ocean currents by satellite altimetry: With application to the Antarctic Circumpolar Current. *J. Geophysical Research* 90(C3):4721-4739.
- Chelton, D. B. 1985. Comment on "Seasonal variation in wind speed and sea state from global satellite measurements" by D. Sandwell and R. Agreen. *J. Geophysical Research* 90(C3):5001-5008.
- Hilland, J. E., D. B. Chelton and E. Njoku. 1985. Production of global sea surface temperature fields for the Jet Propulsion Laboratory Workshop Comparisons. *J. Geophysical Research* 90(C6):11,642-11,650.
- Bernstein, R. L. and D. B. Chelton. 1985. Large-scale sea surface temperature variability from satellite and shipboard measurements. *J. Geophysical Research* 90(C6):11,619-11,630.

ROLAND DE SZOEKE

- de Szoeke, R. 1980. On the effects of horizontal variability of wind stress on the dynamics of the ocean mixed layer. *J. Physical Oceanography* 10:1439-1454.
- de Szoeke, R. and M. Levine. 1981. The advective flux of heat by mean geostrophic motions in the Southern Ocean. *Deep-Sea Research* 28:1057-1085.
- Davis, R., R. de Szoeke, D. Halpern and P. Niiler. 1981. Variability in the upper ocean during MILE. Part I: The heat and momentum balances. *Deep-Sea Research* 28:1427-1451.
- Davis, R., R. de Szoeke and P. Niiler. 1981. Variability in the upper ocean during MILE. Part II: Modeling the mixed layer response. *Deep-Sea Research* 28:1453-1475.

- de Szoeke, R. and J. Richman. 1981. The role of wind-generated mixing in coastal upwelling. *J. Physical Oceanography* 11:1534-1547.
- Levine, M., R. de Szoeke and P. Niiler. 1983. Internal waves in the upper ocean during MILE. *J. Physical Oceanography* 13:240-257.
- de Szoeke, R. 1983. Baroclinic instability over wavy topography. *J. Fluid Mechanics* 130:279-298.
- de Szoeke, R. and J. Richman. 1984. On wind-driven mixed layers with strong horizontal gradients - a theory with application to coastal upwelling. *J. Physical Oceanography* 14:364-377.
- de Szoeke, R. A. 1985. Wind-driven mid-ocean baroclinic gyres over topography: A circulation equation extending the Sverdrup relation. *J. Marine Research* 43:793-824.

TOM DILLON

- Dillon, T. M. and T. M. Powell. 1979. Observations of a surface mixed layer. *Deep-Sea Research* 26:915-932.
- Caldwell, D. R., T. M. Dillon, J. M. Brubaker, P. A. Newberger and C. A. Paulson. 1980. The scaling of vertical temperature gradient spectra. *J. Geophysical Research* 85(C4):1917-1924.
- Dillon, T. M. and D. R. Caldwell. 1980. The Batchelor spectrum and dissipation in the upper ocean. *J. Geophysical Research* 85(C4):1910-1916.
- Dillon, T. M. and D. R. Caldwell. 1980. High frequency internal waves at Ocean Station P. *J. Geophysical Research* 85(C6):3277-3284.
- Caldwell, D. R., T. M. Chriss, P. A. Newberger and T. M. Dillon. 1981. The thinness of oceanic temperature gradient spectra. *J. Geophysical Research* 86(C5):4250-4292.
- Dillon, T. M., J. G. Richman, C. G. Hansen and M. D. Pearson. 1981. Near surface turbulence measurements in a lake. *Nature* 290:390-392.
- Dillon, T. M. and T. M. Powell. 1981. Reply to comment on "Observations of a surface mixed layer." *Deep-Sea Research* 29:656-657.
- Dillon, T. M. and D. R. Caldwell. 1981. Comments on "Signatures of mixing from the Bermuda slope, the Sargasso Sea, and the Gulf Stream." *J. Physical Oceanography* 11:1435-1437.
- Dillon, T. M. 1982. Vertical overturns: A comparison of the Thorpe and Ozmidov length scales. *J. Geophysical Research* 87(C12):9601-9613.
- Dillon, T. M. 1984. The energetics of overturning structures: Implications for the theory of fossil turbulence. *J. Physical Oceanography* 14:541-549.
- Caldwell, D. R., T. M. Dillon and J. N. Moum. 1985. The Rapid-Sampling Vertical Profiler: An evaluation. *J. Atmospheric and Oceanic Technology* 2:615-625.

DAVID ENFIELD

- Enfield, D. B. and J. S. Allen. 1980. On the structure and dynamics of monthly mean sea level anomalies along the Pacific coast of North and South America. *J. Physical Oceanography* 10:557-578.
- Enfield, D. B. 1981. El Niño : Pacific eastern boundary response to interannual forcing. In: *Resource Management and Environmental Uncertainty*, M. Glantz and D. Thompson, editors. New York, Wiley, Interscience. pp. 213-254.

- Enfield, D. B. 1981. Thermally driven wind variability in the planetary boundary layer above Lima, Peru. *J. Geophysical Research* 86(C3):2005-2016.
- Enfield, D. B. 1981. Annual and nonseasonal variability of monthly low-level wind fields over the Southeastern Tropical Pacific. *Monthly Weather Review* 109:2177-2190.
- Enfield, D. B. and J. S. Allen. 1983. The generation and propagation of energetic sea level events along the Pacific coast of Mexico. *J. Physical Oceanography* 13:1012-1033.

ADRIANA HUYER

- Barber, R. T. and A. Huyer. 1979. Nitrite and static stability in the coastal waters off Peru. *Geophysical Research Letters* 6:409-412.
- Huyer, A., E. Sobey and R. L. Smith. 1979. The spring transition in currents over the Oregon continental shelf. *J. Geophysical Research* 84(C11):6995-7011.
- Smith, S. L., K. H. Brink, H. Santander, T. J. Cowles and A. Huyer. 1981. The effect of advection on variations in zooplankton at a single location near Cabo Nazca, Peru. In: *Coastal Upwelling*, F. A. Richards, editor. American Geophysical Union, Washington, D.C. pp. 400-416.
- Huyer, A., 1980. The offshore structure and subsurface expression of sea level variations off Peru, 1976-1977. *J. Physical Oceanography* 10:1755-1768.
- Brockmann, C., E. Fahrbach, A. Huyer and R. L. Smith. 1980. The poleward undercurrent along the Peru Coast: 5 to 15°S. *Deep-Sea Research* 27:847-856.
- Huyer, A. 1983. Coastal upwelling in the California current system. *Progress in Oceanography* 12:259-284.
- Kruse, G. H. and A. Huyer. 1983. Relationships among shelf temperatures, coastal sea level, and the coastal upwelling index off Newport, Oregon. *Canadian J. Fisheries and Aquatic Sciences* 40:238-242.
- Anderson, I., A. Huyer and R. L. Smith. 1983. Near-inertial motions off the Oregon coasts. *J. Geophysical Research* 88(C10):5960-5972.
- Brink, K. H., D. Halpern, A. Huyer and R. L. Smith. 1983. The physical environment of the Peruvian upwelling system. *Progress in Oceanography* 12:285-305.
- Allen, J. S., et al., including A. Huyer. 1983. Physical oceanography of continental shelves. *Reviews of Geophysics and Space Physics* 21:1149-1181.
- Huyer, A. 1984. Hydrographic observations along the CODE Central Line off northern California, 1981. *J. Physical Oceanography* 14:1647-1658.
- Huyer, A., R. L. Smith and B. M. Hickey. 1984. Observations of a warmcore eddy off Oregon, January to March 1978. *Deep-Sea Research* 31:97-117.
- Huyer, A. and R. L. Smith. 1985. The signature of El Niño off Oregon, 1982-1983. *J. Geophysical Research* 90(C4):7133-7142.

ED JOSBERGER

- Josberger, E. and S. Neshyba. 1980. Iceberg melt-driven convection inferred from field measurements of temperature. *Annals of Glaciology* 1:113-117.
- Neshyba, S. and E. Josberger. 1980. On the estimation of Antarctic iceberg melt rate. *J. Physical Oceanography* 10:1681-1685.

MURRAY LEVINE

- de Szoeké, R. A. and M. D. Levine. 1981. The advective flux of heat by mean geostrophic motions in the Southern Ocean. *Deep-Sea Research* 28:1057-1085.
- Levine, M. D. 1981. Dynamic response of VACM temperature sensor. *Deep-Sea Research* 28:1401-1408.
- Levine, M. D. and J. D. Irish. 1981. A statistical description of temperature finestructure in the presence of internal waves. *J. Physical Oceanography* 11:676-691.
- Levine, M. D. 1983. Internal waves in the ocean: a review. *Reviews of Geophysics and Space Physics* 21:1206-1216.
- Levine, M. D., C. A. Paulson, M. G. Briscoe, R. A. Weller and H. Peters. 1983. Internal waves in JASIN. *Philosophical Trans. of the Royal Soc. London* A308:389-405.
- Levine, M. D., R. A. de Szoeké and P. P. Niiler. 1983. Internal waves in the upper ocean during MILE. *J. Physical Oceanography* 13:240-257.
- Levine, M. D. and C. A. Paulson. 1985. Internal waves in the Arctic Ocean: Comparison with lower-latitude observations. *J. Physical Oceanography* 15:800-809.
- Morison, J. H., C. E. Long and M. D. Levine. 1985. Internal wave dissipation under sea ice. *J. Geophysical Research* 90(C6):11,959-11,966.

JAMES N. MOUM

- Caldwell, D. R., T. M. Dillon and J. N. Moum. 1985. The Rapid-Sampling Vertical Profiler: An evaluation. *J. Atmospheric and Oceanic Technology* 2:615-625.
- Moum, J. N. and R. G. Lueck. 1985. Causes and implications of noise in oceanic dissipation measurements. *Deep-Sea Research* 32:379-390.
- Moum, J. N. and D. R. Caldwell. 1985. Local influences on shear-flow turbulence in the equatorial ocean. *Science* 230:315-316.

VICTOR T. NEAL

- Neal, V. T. and W. D. Nowlin, Jr. 1979. International Southern Ocean Studies of circumpolar dynamics. *Polar Record* 19:461-471.
- Quinn, W. and V. T. Neal. 1983. Long-term variations in the Southern Oscillation, El Niño and Chilean subtropical rainfall. *Fishery Bulletin* 81:363-374.

STEVE NESHYBA

- Silva, N. and S. Neshyba. 1979. On the southernmost extension of the Peru-Chile Undercurrent. *Deep-Sea Research* 26:1387-1393.
- Neshyba, S. 1980. On the size distribution of Antarctic icebergs. *Cold Regions Science and Technology* 1:241-248.
- Neshyba, S. and T. Fonseca. 1980. Evidence for counterflow to the west wind drift off South America. *J. Geophysical Research* 85(C9):4888-4892.
- Josberger, E. and S. Neshyba. 1980. Iceberg melt-driven convection inferred from field measurements of temperature. *Annals of Glaciology* 1:113-117.

- Neshyba, S. and E. Josberger. 1980. On the estimation of Antarctic iceberg melt rate. *J. Physical Oceanography* 10:1681-1685.
- Uribe, E., S. Neshyba and T. Fonseca. 1982. Phytoplankton community composition across the West Wind Drift off South America. *Deep-Sea Research* 29:1229-1243.
- Trump, C. L., S. Neshyba and W. V. Burt. 1982. Effects of mesoscale atmospheric convection cells on waters of the East China Sea. *Boundary-Layer Meteorology* 24:15-34.
- Neshyba, S. 1985. Comment on "Ice-induced vertical circulation in an Arctic fiord" by Edward P. W. Horne. *J. Geophysical Research* 90(C3):5011-5012.

PRISCILLA NEWBERGER

- Caldwell, D. R., T. M. Dillon, J. M. Brubaker, P. A. Newberger and C. A. Paulson. 1980. The scaling of vertical temperature-gradient spectra. *J. Geophysical Research* 85(C4):1917-1924.
- Newberger, P. A. and D. R. Caldwell. 1981. Mixing and the bottom nepheloid layer. *Marine Geology* 41:321-336.
- Caldwell, D. R., T. M. Chriss, P. A. Newberger and T. M. Dillon. 1981. The thinness of oceanic temperature gradients. *J. Geophysical Research* 86(C5):4290-4292.
- Newberger, P. A. and D. R. Caldwell. 1981. An inertial subrange in microstructure spectra. *J. Geophysical Research* 86(C5):4265-4268.

P. PETER NIILER

- Niiler, P. P. 1980. Effect of a western boundary eddy field on mid-ocean circulation. *Dynamics of Atmospheres and Oceans* 5:73-82.
- Davis, R., R. de Szoeke, D. Halpern and P. P. Niiler. 1981. Variability in the upper ocean during MILE. Part I: The heat and momentum balances. *Deep-Sea Research* 28:1427-1451.
- Davis, R., R. de Szoeke and P. P. Niiler. 1981. Variability in the upper ocean during MILE. Part II: Modeling the mixed layer response. *Deep-Sea Research* 28:1453-1475.
- Keffer, T. and P. P. Niiler. 1982. Eddy convergence of heat, salt, density, and vorticity in the subtropical North Atlantic. *Deep-Sea Research* 29:201-216.
- Koblinsky, C. and P. P. Niiler. 1982. The relationship between deep ocean currents and winds east of Barbados. *J. Physical Oceanography* 12:144-153.
- Fu, L. L., T. Keffer, P. P. Niiler and C. Wunsch. 1982. Observations of mesoscale variability in the North Atlantic: A comparative study. *J. Marine Research* 40:809-848.
- Levine, M. D., R. A. de Szoeke and P. P. Niiler. 1983. Internal waves in the upper ocean during MILE. *J. Physical Oceanography* 13:240-257.

HASONG PAK

- Zaneveld, J. R. V. and H. Pak. 1979. Optical and particulate properties at oceanic fronts. *J. Geophysical Research* 84(C12):7781-7790.
- Spinrad, R. W., J. R. V. Zaneveld and H. Pak. 1979. Irradiance and beam transmittance measurements off the West Coast of the Americas. *J. Geophysical Research* 84(C1):355-358.

- Pak, H., L. Codispoti and J. R. V. Zaneveld. 1980. On the intermediate particle maxima associated with oxygen-poor water off western South America. *Deep-Sea Research* 27:783-797.
- Pak, H., J. R. V. Zaneveld and J. C. Kitchen. 1980. Intermediate nepheloid layers observed off Oregon and Washington. *J. Geophysical Research* 85(C11):6697-6708.
- Pak, H., J. Kitchen, P. Donaghay and J. R. V. Zaneveld. 1981. Some observations on the effect of ozone treatment on suspended particulate matter in seawater. *Estuarine, Coastal and Shelf Science* 13:327-336.
- Zaneveld, J. R. V., J. Kitchen and H. Pak. 1981. The influence of optical water type on the heating rate of a constant depth mixed layer. *J. Geophysical Research* 86(C7):6426-6428.
- Kitchen, J., J. R. V. Zaneveld and H. Pak. 1981. Effect of particle size distribution and chlorophyll content on beam attenuation spectra. *Applied Optics* 21:3913-3918.
- Pak, H. 1983. Fluctuations of beam attenuation coefficient in the lowest 2 m on the continental rise off Nova Scotia. *Marine Geology* 51:77-97.
- Pak, H. and J. R. V. Zaneveld. 1983. Temporal variations of beam attenuation coefficient on the Continental Rise off Nova Scotia. *J. Geophysical Research* 88(C7):4427-4432.
- Pak, H., J. R. V. Zaneveld and R. W. Spinrad. 1984. Vertical distribution of suspended particulate matter in the Zaire River estuary and plume. *Netherlands J. of Sea Research* 17:412-425.

CLAYTON PAULSON

- Simpson, J. J. and C. A. Paulson. 1979. Mid-ocean observations of atmospheric radiation. *Quarterly J. Royal Meteorological Soc.* 105:487-502.
- Simpson, J. and C. A. Paulson. 1979. Observations of upper ocean temperature and salinity structure during the POLE experiment. *J. Physical Oceanography* 9:869-884.
- Andreas, E. L., C. A. Paulson, R. M. Williams, R. W. Lindsay and J. A. Businger. 1979. The turbulent heat flux from Arctic leads. *Boundary-Layer Meteorology* 17:57-91.
- Andreas, E. L. and C. A. Paulson. 1979. Velocity spectra and co-spectra and integral statistics over Arctic leads. *Quarterly J. Royal Meteorological Soc.* 105:1053-1070.
- Paulson, C. 1980. A review of the AIDJEX atmospheric program. In: *Sea Ice Processes and Models*, R. S. Pritchard, editor. University of Washington Press, Seattle. pp. 28-33.
- Paulson, C. 1980. Oceanic radiation instruments. In: *Air-Sea Interaction: Instruments and Methods*, F. Dobson, L. Hasse and R. Davis, editors. Plenum, New York. pp. 509-521.
- Simpson, J. J. and C. A. Paulson. 1980. Small-scale sea surface temperature structure. *J. Physical Oceanography* 10:399-410.
- Simpson, J. J. and C. A. Paulson. 1980. Reply. *J. Physical Oceanography* 10:1881-1882.
- Caldwell, D. R., T. M. Dillon, J. M. Brubaker, P. A. Newberger and C. A. Paulson. 1980. The scaling of vertical temperature gradient spectra. *J. Geophysical Research* 85(C4):1917-1924.
- Andreas, E. L., R. M. Williams and C. A. Paulson. 1981. Observations of condensate profiles over Arctic leads with a hot-film anemometer. *Quarterly J. Royal Meteorological Soc.* 107:437-460.

- Paulson, C. A. and J. J. Simpson. 1981. The temperature difference across the cool skin of the ocean. *J. Geophysical Research* 86(C11):11,044-11,054.
- Levine, M. D., C. A. Paulson, M. G. Briscoe, R. A. Weller and H. Peters. 1983. Internal waves in JASIN. *Philosophical Trans. Royal Soc. London* A308:389-405.
- Levine, M. D., C. A. Paulson and J. H. Morison. 1985. Internal waves in the Arctic Ocean: Comparison with lower-latitude observations. *J. Physical Oceanography* 15:800-809.

R. DALE PILLSBURY

- Nowlin, W. D., Jr. and R. D. Pillsbury. 1979. DRAKE 79 operations aboard R/V MELVILLE. *Antarctic J. of the United States* XIV(5):121-123.
- Pillsbury, R. D., T. Whitworth III, W. D. Nowlin, Jr. and F. Sciremammano. 1979. Currents and temperatures as observed in Drake Passage during 1975. *J. Physical Oceanography* 9:469-482.
- Fandry, C. and R. D. Pillsbury. 1979. On the estimation of absolute geostrophic volume transport applied to the Antarctic Circumpolar Current. *J. Physical Oceanography* 9:449-455.
- Bryden, H., D. Halpern and R. D. Pillsbury. 1980. Importance of eddy heat flux in a heat budget for Oregon coastal waters. *J. Geophysical Research* 85(C11):6649-6653.
- Sciremammano, F., Jr., R. D. Pillsbury, W. D. Nowlin and T. Whitworth III. 1980. Spatial scales of temperature and flow in Drake Passage. *J. Geophysical Research* 85(C7):4015-4028.
- Pillsbury, R. D. 1981. Drake Passage pilot ocean monitoring project activities. *Antarctic J. of the United States*, 1981 Review. XVI(5):102.
- Nowlin, W. D., Jr., R. D. Pillsbury and J. Bottero. 1981. Observations of kinetic energy levels in the Antarctic Circumpolar Current at Drake Passage. *Deep-Sea Research* 28:1-17.
- Nowlin, W. D., Jr., J. S. Bottero and R. D. Pillsbury. 1982. Observations of the principal tidal currents at Drake Passage. *J. Geophysical Research* 87(C8):5752-5770.
- Pillsbury, R. D. and J. S. Bottero. 1984. Observations of current rings in the Antarctic Zone at Drake Passage. *J. Marine Research* 42:853-874.

WILLIAM QUINN

- Quinn, W. H. 1980. Monitoring and predicting short-term climatic changes in the South Pacific Ocean. *Investigaciones Marinas, Univ. Catolica de Valparaiso, Chile* 8(1/2):77-114.
- Quinn, W. H. and V. T. Neal. 1983. Long-term variations in the Southern Oscillation, El Niño, and Chilean subtropical rainfall. *Fishery Bulletin* 81:363-374.
- Quinn, W. H. and V. T. Neal. 1983. Recent climatic change and the 1982-83 El Niño. In: *Proceedings of the Eight Climate Diagnostics Workshop*, October 17-21, 1983, Canadian climate Centre, Toronto, Ontario, Canada. pp. 148-154.
- Quinn, W. H. and V. T. Neal. 1983. Southern Oscillation-related climatic changes and the 1982-83 El Niño. In: *Proceedings of the International Conference on Marine Resources of the Pacific*, P. Arana, editor, May 16-20, 1983, Viña del Mar, Chile. p. 71-82.

- Quinn, W. H. and D. O Zopf. 1984. The unusual intensity of the 1982-83 ENSO event. Tropical Ocean-Atmosphere Newsletter, No. 26, D. Halpern, editor. p. 1720.
- Quinn, W. H. and V. T. Neal. 1984. Recent long-term climatic change over the eastern tropical and subtropical Pacific and its ramifications. In: Proceedings of the Ninth Annual Climate Diagnostics Workshop, U.S. Dept. of Commerce, Washington, D.C. pp. 101-109.

JAMES RICHMAN

- Dillon, T. M., J. G. Richman, C. G. Hanson and M. D. Pearson. 1981. Near surface turbulence measurements in a lake. Nature 290:390-392.
- de Szoek, R. A. and J. G. Richman. 1981. The role of wind-generated mixing in coastal upwelling. J. Physical Oceanography 11:1534-1547.
- Richman, J. G. and A. Badan-Dangon. 1983. Mean heat and momentum budgets for the coastal waters off Northwest Africa. J. Geophysical Research 88(C4):2626-2632.
- de Szoek, R. A. and J. G. Richman. 1984. On wind-driven mixed layers with strong horizontal gradients - a theory with application to coastal upwelling. J. Physical Oceanography 14:364-377.

FRANK SCIREMAMMANO

- Sciremammano, F., Jr. 1979. Observations of Antarctic polar front motions in deep water expression. J. Physical Oceanography 9:221-226.
- Pillsbury, R. D., T. Whitworth III, W. D. Nowlin, Jr. and F. Sciremammano Jr. 1979. Currents and temperatures as observed in Drake Passage during 1975. J. Physical Oceanography 9:469-482.
- Sciremammano, F., Jr. 1980. The nature of poleward heat flux due to low-frequency current fluctuations in Drake Passage. J. Physical Oceanography 10:843-852.
- Sciremammano, F., Jr., R. D. Pillsbury, W. D. Nowling and T. Whitworth III. 1980. Spatial scales of temperature and flow in Drake Passage. J. Geophysical Research 85(C7):4015-4028.

ROBERT L. SMITH

- Huyer, A., E. Sobey and R. L. Smith. 1979. The spring transition in currents over the Oregon continental shelf. J. Geophysical Research 84(C11):6995-7001.
- Walsh, J. L. et al., including R. L. Smith. 1980. The spawning habitat of the Peruvian anchovy, Engraulis ringens. Deep-Sea Research 27:1-27.
- Brink, K. H., D. Halpern and R. L. Smith. 1980. Circulation in the Peruvian upwelling system near 15°S. J. Geophysical Research 85(C7):4036-4048.
- Brockmann, C., E. Fahrbach, A. Huyer and R. L. Smith. 1980. The poleward undercurrent along the Peru coast: 5 to 15°S. Deep-Sea Research 27:847-856.
- Mittelstaedt, E., D. Halpern, R. L. Smith and J. S. Bottero. 1980. Tidal currents off Mauritania at 21°40'N. Deutsche Hydrographische Zeitschrift 33:223-235.
- Barber, R. T. and R. L. Smith. 1981. Coastal upwelling ecosystems. In: Analysis of marine ecosystems, A. R. Longhurst, editor. Academic Press, London. pp. 31-68.

- Smith, R. L. 1981. A comparison of the structure and variability of the flow field in three coastal upwelling regions: Oregon, Northwest Africa, and Peru. In: Coastal Upwelling, F. A. Richards, editor. American Geophysical Union. p. 107-118.
- Allen, J. S. and R. L. Smith. 1981. On the dynamics of wind-driven shelf currents. Philosophical Trans. Royal Soc. London A302:617-634.
- Cushman-Benoit, B., J. J. O'Brien and R. L. Smith. 1983. On wind and ocean-velocity correlations in a coastal-upwelling system. J. Physical Oceanography 13:547-550.
- Allen, J. S. et al., including R. L. Smith. 1983. Physical oceanography of continental shelves. Reviews of Geophysics and Space Physics 21:1149-1181.
- Smith, R. L. 1983. Circulation patterns in upwelling regimes. In: Coastal upwelling: Its sediment record, Pt. A, E. Suess and J. Thiede, editors. Plenum Press, NY. p. 13-35.
- Anderson, I., A. Huyer and R. L. Smith. 1983. Near-inertial motions off the Oregon coast. J. Geophysical Research 88(C10):5960-5972.
- Brink, H. K., D. Halpern, A. Huyer and R. L. Smith. 1983. The physical environment of the Peruvian upwelling system. Progress in Oceanography 12:285-305.
- Smith, R. L. 1983. Peru coastal currents during El Niño: 1976 and 1982. Science 221:1397-1399.
- Romea, R. D. and R. L. Smith. 1983. Further evidence for coastal trapped waves along the Peru coast. J. Physical Oceanography 13:1341-1356.
- Huyer, A., R. L. Smith and B. M. Hickey. 1984. Observations of a warmcore eddy off Oregon, January to March 1978. Deep-Sea Research 31:97-117.
- Huyer, A. and R. L. Smith. 1985. The signature of El Niño off Oregon, 1982-1983. J. Geophysical Research 90(C4):7133-7142.

P. TED STRUB

- Strub, P. T., T. Powell and C. R. Goldman. 1985. Climatic forcing: Effects of El Niño on a small, temperate lake. Science 227:55-57.

LYNNE D. TALLEY

- Talley, L. D. 1983. Radiating barotropic instability. J. Physical Oceanography 13:972-987.
- Talley, L. D. 1983. Radiating instabilities of thin baroclinic jets. J. Physical Oceanography 13:2161-2181.
- Talley, L. D. 1984. Meridional heat transport in the Pacific Ocean. J. Physical Oceanography 14:231-241.

J. RONALD V. ZANEVELD

- Zaneveld, J. R. V. and H. Pak. 1979. Optical and particulate properties at oceanic fronts. J. Geophysical Research 84(C12):7781-7790.
- Zaneveld, J. R. V., R. W. Spinrad and R. Bartz. 1979. Optical properties of turbidity standards. Proceedings of the Society of Photo-Optical Instrumentation Engineers, Vol. 208. Ocean Optics VI. pp. 159-168.
- Gordon, H. R., R. C. Smith and J. R. V. Zaneveld. 1979. Introduction to ocean optics. Proceedings of the Society of Photo-Optical Instrumentation Engineers, Vol. 208. Ocean Optics VI. pp. 14-55.

- Spinrad, R., J. R. V. Zaneveld and H. Pak. 1979. Irradiance and beam transmittance measurements off the West Coast of the Americas. *J. Geophysical Research* 84(C1):355-358.
- Harvey, R. R., J. R. V. Zaneveld and R. Bartz. 1979. Deep water characteristics of the Maui Basin. *J. Oceanographical Soc. Japan* 35:187-190.
- Pak, H., L. Codispoti and R. J. V. Zaneveld. 1980. On the intermediate particle maxima associated with the oxygen-poor water off western South America. *Deep-Sea Research* 27:783-797.
- Zaneveld, J. R. V. and R. W. Spinrad. 1980. An arc tangent model of irradiance in the sea. *J. Geophysical Research* 85(C9):4919-4922.
- Pak, H., J. R. V. Zaneveld and J. Kitchen. 1980. Intermediate nepheloid layers observed off Oregon and Washington. *J. Geophysical Research* 85(C11):6697-6708.
- Pak, H., J. Kitchen, P. Donaghay and J. R. V. Zaneveld. 1981. Some observations on the effect of ozone treatment on suspended particulate matter in seawater. *Estuarine, Coastal and Shelf Science* 13:327-336.
- Zaneveld, J. R. V., J. Kitchen and H. Pak. 1981. The influence of optical water type on the heating rate of a constant depth mixed layer. *J. Geophysical Research* 86(C7):6426-6428.
- Zaneveld, J. R. V. 1982. Remotely sensed reflectance and its dependence on vertical structure: a theoretical derivation. *Applied Optics* 21:4146-4150.
- Zaneveld, J. R. V., R. W. Spinrad and R. Bartz. 1982. An optical settling tube for the determination of particle-size distributions. *Marine Geology* 49:357-376.
- Kitchen, J. C., J. R. V. Zaneveld and H. Pak. 1982. Effect of particle size distribution and chlorophyll content on beam attenuation spectra. *Applied Optics* 21:3913-3918.
- Spinrad, R. W. and J. R. V. Zaneveld. 1982. An analysis of the optical features of the near-bottom and bottom nepheloid layers in the area of the Scotian Rise. *J. Geophysical Research* 87(C12):9553-9561.
- Spinrad, R. W., J. R. V. Zaneveld and J. C. Kitchen. 1983. A study of the optical characteristics of the suspended particles in the benthic nepheloid layer of the Scotian Rise. *J. Geophysical Research* 88(C12):7641-7645.
- Pak, H. and J. R. V. Zaneveld. 1983. Temporal variations of beam attenuation coefficient on the Continental Rise off Nova Scotia. *J. Geophysical Research* 88(C7):4427-4432.
- Pak, H., J. R. V. Zaneveld and R. W. Spinrad. 1984. Vertical distribution of suspended particulate matter in the Zaire River estuary and plume. *Netherlands J. of Sea Research* 17:412-425.
- Gardner, W. D., P. E. Biscaye, J. R. V. Zaneveld and M. J. Richardson. 1985. Calibration and comparison of the LDGO nephelometer and the OSU transmissometer on the Nova Scotian rise. *Marine Geology* 66:323-344.
- Bartz, R., J. R. V. Zaneveld, et al. 1985. ROST and TEAST: Devices for in-situ measurement of particle settling velocity. *Marine Geology* 66:381-395.

II. RESEARCH ASSISTANTS AND STUDENTS

EDGAR L. ANDREAS

- Andreas, E. L., C. A. Paulson, R. M. Williams, R. W. Lindsay and J. A. Businger. 1979. The turbulent heat flux from Arctic leads. *Boundary-Layer Meteorology* 17:57-91.
- Andreas, E. L. and C. A. Paulson. 1979. Velocity spectra and co-spectra and integral statistics over Arctic leads. *Quarterly J. Royal Meteorological Soc.* 105:1053-1070.
- Andreas, E. L., R. M. Williams and C. A. Paulson. 1981. Observations of condensate profiles over Arctic leads with a hot-film anemometer. *Quarterly J. Royal Meteorological Soc.* 107:437-460.

ANTOINE BADAN-DANGON

- Richman, J. G. and A. Badan-Dangon. 1983. Mean heat and momentum budgets for the coastal waters off Northwest Africa. *J. Geophysical Research* 88(C4):2626-2632.

ROBERT BARTZ

- Harvey, R. R., J. R. V. Zaneveld and R. Bartz. 1979. Deep water characteristics of the Maui Basin. *J. of Oceanographical Society of Japan* 35:187-190.
- Zaneveld, J. R. V., R. W. Spinrad and R. Bartz. 1982. An optical settling tube for the determination of particle-size distributions. *Marine Geology* 49:357-376.
- Bartz, R., J. R. V. Zaneveld, et al. 1985. ROST and BEAST: Devices for in-situ measurement of particle settling velocity. *Marine Geology* 66:381-395.

JOSEPH BOTTERO

- Nowlin, W. D., Jr., R. D. Pillsbury and J. Bottero. 1981. Observations of kinetic energy levels in the Antarctic Circumpolar Current at Drake Passage. *Deep-Sea Research* 28:1-17.
- Mittelstaedt, E., D. Halpern, R. L. Smith and J. S. Bottero. 1980. Tidal currents off Mauritania at 21°40'N. *Deutsche Hydrographische Zeitschrift* 33:223-235.
- Nowlin, W. D., Jr., J. S. Bottero and R. D. Pillsbury. 1982. Observations of the principal tidal currents at Drake Passage. *J. Geophysical Research* 87(C8):5752-5770.
- Pillsbury, R. D. and J. S. Bottero. 1984. Observations of current rings in the Antarctic Zone at Drake Passage. *J. Marine Research* 42:853-874.

JOHN BRUBAKER

- Caldwell, D. R., T. M. Dillon, J. M. Brubaker, P. A. Newberger and C. A. Paulson. 1980. The scaling of vertical temperature-gradient spectra. *J. Geophysical Research* 85(C4):1917-1924.

TERRY CHRISS

- Caldwell, D. R. and T. M. Chriss. 1979. The viscous sublayer at the sea floor. *Science* 205:1131-1132.
- Caldwell, D. R., T. M. Chriss, P. A. Newberger and T. M. Dillon. 1981. The thinness of oceanic temperature gradients. *J. Geophysical Research* 86(C5):4290-4292.
- Chriss, T. M. and D. R. Caldwell. 1982. Evidence for the influence of form drag and bottom layer flow. *J. Geophysical Research* 87(C6):4148-4154.
- Chriss, T. M. and D. R. Caldwell. 1984. Universal similarity and the thickness of the viscous sublayer at the ocean floor. *J. Geophysical Research* 89(C4):6403-6414.
- Chriss, T. M. and D. R. Caldwell. 1984. Turbulence spectra from the viscous sublayer and buffer layer at the ocean floor. *J. Fluid Mechanics* 142:39-55.

DONALD DENBO

- Denbo, D. W. and J. S. Allen. 1983. Mean flow generation on a continental margin by periodic wind forcing. *J. Physical Oceanography* 13:79-92.
- Denbo, D. W. and J. S. Allen. 1984. Rotary empirical orthogonal function analysis of currents near the Oregon coast. *J. Physical Oceanography* 14:35-46.
- Allen, J. S. & D. W. Denbo. 1984. Statistical characteristics of large-scale response of coastal sea level to atmospheric forcing. *J. Physical Oceanography* 14:1079-1094.

STUART EIDE

- Caldwell, D. R. and S. A. Eide. 1980. Adiabatic gradient and potential temperature correction in pure and saline water: an experimental determination. *Deep-Sea Research* 27:71-78.
- Caldwell, D. R. and S. A. Eide. 1981. Soret coefficient and isothermal diffusivity of aqueous solutions of five principal salt constituents of sea water. *Deep-Sea Research* 28:1605-1618.
- Caldwell, D. R. and S. A. Eide. 1985. Separation of seawater by Soret diffusion. *Deep-Sea Research* 32:965-982.

THOMAS FONSECA

- Neshyba, S. and T. Fonseca. 1980. Evidence for counterflow to the West Wind Drift off South America. *J. Geophysical Research* 85(C9):4888-4892.
- Uribe, E., S. Neshyba and T. Fonseca. 1982. Phytoplankton community composition across the West Wind Drift off South America. *Deep-Sea Research* 29:1229-1243.

GEORGE HALLIWELL, JR.

- Halliwell, G. R., Jr. and J. S. Allen. 1984. Large-scale sea level response to atmospheric forcing along the west coast of North America, Summer 1973. *J. Physical Oceanography* 14:864-886.

THOMAS KEFFER

- Keffer, T. and P. P. Niiler. 1982. Eddy convergence of heat, salt, density, and vorticity in the subtropical North Atlantic. *Deep-Sea Research* 29:201-216.
- Koblinsky, C. and P. P. Niiler. 1982. The relationship between deep ocean currents and winds east of Barbados. *J. Physical Oceanography* 12:144-153.
- Fu, L. L., T. Keffer, P. P. Niiler and C. Wunsch. 1982. Observations of mesoscale variability in the North Atlantic: A comparative study. *J. Marine Research* 40:809-848.
- Keffer, T. 1983. Time-dependent temperature and vorticity balances in the Atlantic North Equatorial current. *J. Physical Oceanography* 13:224-239.

JAMES KITCHEN

- Pak, H., J. R. V. Zaneveld and J. Kitchen. 1980. Intermediate nepheloid layers observed off Oregon and Washington. *J. Geophysical Research* 85(C11):6697-6708.
- Pak, H., J. Kitchen, P. Donaghay and J. R. V. Zaneveld. 1981. Some observations on the effect of ozone treatment on suspended particulate matter in seawater. *Estuarine, Coastal & Shelf Science* 13:327-336.
- Zaneveld, J. R. V., J. Kitchen and H. Pak. 1981. The influence of optical water type on the heating rate of a constant depth mixed layer. *J. Geophysical Research* 86(C7):6426-6428.
- Kitchen, J. C., J. R. V. Zaneveld and H. Pak. 1982. Effect of particle size distribution and chlorophyll content on beam attenuation spectra. *Applied Optics* 21:3913-3918.
- Spinrad, R. W., J. R. V. Zaneveld and J. C. Kitchen. 1983. A study of the optical characteristics of the suspended particles in the benthic nepheloid layer of the Scotian Rise. *J. Geophysical Research* 88(C12):7641-7645.

RICHARD ROMEA

- Allen, J. S. and R. D. Romea. 1980. On coastal trapped waves at low latitudes in a stratified ocean. *J. Fluid Mechanics* 98:555-585.
- Romea, R. D. and J. S. Allen. 1982. On forced coastal trapped waves at low latitudes in a stratified ocean. *J. Marine Research* 40:369-401.
- Romea, R. D. and J. S. Allen. 1983. On vertically propagating coastal Kelvin waves at low latitudes. *J. Physical Oceanography* 13:1241-1254.
- Romea, R. D. and R. L. Smith. 1983. Further evidence for coastal trapped waves along the Peru coast. *J. Physical Oceanography* 13:1341-1356.
- Romea, R. D., J. S. Allen. 1984. The effect of friction and topography on coastal internal Kelvin waves at low latitudes. *Tellus* 36A:384-400.

RICHARD SPINRAD

- Spinrad, R., J. R. V. Zaneveld and H. Pak. 1979. Irradiance and beam transmittance measurements off the West Coast of the Americas. J. Geophysical Research 84(C1):355-358.
- Zaneveld, J. R. V. and R. W. Spinrad. 1980. An arc tangent model of irradiance in the sea. J. Geophysical Research 85(C9):4919-4922.
- Zaneveld, J. R. V., R. W. Spinrad and R. Bartz. 1982. An optical settling tube for the determination of particle-size distributions. Marine Geology 49:357-376.
- Spinrad, R. W. and J. R. V. Zaneveld. 1982. An analysis of the optical features of the near-bottom and bottom nepheloid layers in the area of the Scotian Rise. J. Geophysical Research 87(C12):9553-9561.
- Spinrad, R. W., J. R. V. Zaneveld and J. C. Kitchen. 1983. A study of the optical characteristics of the suspended particles in the benthic nepheloid layer of the Scotian Rise. J. Geophysical Research 88(C12):7691-7645.
- Pak, H., J. R. V. Zaneveld and R. W. Spinrad. 1984. Vertical distribution of suspended particulate matter in the Zaire River estuary and plume. Netherlands J. of Sea Research 17:412-425.

GEOPHYSICS

I. FACULTY

DALLAS ABBOTT

- Abbott, D. H., W. H. Menke, and R. Morin, 1983. Constraints upon water advection in sediments of the Mariana Trough. *J. Geophysical Research* 88(B2):1075-1093.
- Embley, R. W., M. A. Hobart, R. N. Anderson, and D. H. Abbott. 1983. Anomalous heat flow in the northwest Atlantic: A case for continued hydrothermal circulation in 80 M.Y. crust. *J. Geophysical Research* 88(B2):1067-1074.
- Abbott, D. H., W. H. Menke, M. Hobart, R. N. Anderson, and R. W. Embley. 1984. Correlated sediment thickness, temperature gradient, and excess pore pressure in a marine fault block basin. *Geophysical Research Letters* 11:485-488.
- Abbott, D. H. and S. E. Hoffman. 1984. Archean plate tectonics revisited 1: Heat flow, spreading rate, and the age of subducting oceanic lithosphere and their effects on the origin and evolution of continents. *Tectonics* 3:429-448.
- Abbott, D. 1984. Archean plate tectonics revisited 2: Paleo-sea level change, continental area, oceanic heat loss and the area-age distribution of the ocean basin. *Tectonics* 3:709-722.
- Abbott, D. and M. Lyle. 1984. Age of oceanic plates at subduction and volatile recycling. *Geophysical Research Letters* 11:951-954.
- Abbott, D. H., R. W. Embley and M. A. Hobart. 1985. Correlation of shear strength, hydraulic conductivity, and thermal gradients with sediment disturbance: South Pass region, Mississippi Delta. *Geo-Marine Letters* 5:113-119.

L. DALE BIBEE

- Bibee, L. D., G. G. Shor, Jr., R. S. Lu. 1980. Inter-arc spreading in the Mariana Trough. *Marine Geology* 35:183-197.
- Lee, Chao-Shing, G. G. Shor, Jr., L. D. Bibee, R. S. Lu, T. W. C. Hilde. 1980. Okinawa Trough: Origin of a back-arc basin. *Marine Geology* 35:219-241.
- Project Rose Scientists. 1981. Microearthquake activity on the Orozco Fracture Zone: Preliminary results from Project ROSE. *J. Geophysical Research* 86(B5):3783-3790.
- Stern, R. J. and L. D. Bibee. 1984. Esmeralda Bank: Geochemistry of an active submarine volcano in the Mariana island arc. *Contributions to Mineralogy and Petrology* 86:159-169.

GUNNAR BODVARSSON

- Bodvarsson, G. 1982. Glaciation and geothermal processes in Iceland. *Jökull* 32:21-28.
- Bodvarsson, G. 1982. Terrestrial energy currents and transfer in Iceland. In: *Continental and Oceanic Rifts*, G. Palmason, ed., American Geophysical Union Geodynamics Series 8:271-282.

- Bodvarsson, G. and G. M. Reistad. 1983. Forced geoheat recovery for moderate temperature uses. *J. Volcanology and Geothermal Research* 15:247-267.
- Bodvarsson, G. 1983. Improper continuation of geophysical potential fields. *J. Engineers Association Iceland* 68:14-15.
- Bodvarsson, G. 1983. Analogy between the uptake of heat and solutes by low-temperature thermal waters in Iceland. *J. Volcanology and Geothermal Research* 19:99-111.
- Bodvarsson, G. 1983. Lava flows and forms. *Jökull* 33:57-60.
- Bodvarsson, G. 1983. Temperature/flow statistics and thermomechanics of low-temperature geothermal systems in Iceland. *J. Volcanology and Geothermal Research* 19:255-280.
- Bodvarsson, G. 1983. Hydroelastic oscillations in borehole-cavity systems. *J. Engineers Association Iceland* 68:22-32.

RICHARD W. COUCH

- Couch, R. and D. Braman. 1979. Geology of the continental margin near Florence, Oregon. *Oregon Geology* 41:171-179.
- Ness, G., S. Levi and R. Couch. 1980. Marine magnetic anomaly time-scales for the Cenozoic and late Cretaceous: A precis, critique and synthesis. *Reviews of Geophysics and Space Physics* 18:753-770.
- Couch, R. and S. Woodcock. 1981. Gravity and structure of the continental margins of southwestern Mexico and northwestern Guatemala. *J. Geophysical Research* 86(B3):1829-1840.
- Couch, R. and R. Whitsett. 1981. Structures of the Nazca Ridge and the continental shelf and slope of southern Peru. In: *Nazca Plate: Crustal Formation and Andean Convergence*. L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, eds., *Geological Soc. America Memoir* 154. pp. 569-586.
- Couch, R., R. Whitsett, B. Huehn and L. Briceño. 1981. Structures of the continental margin of Peru and Chile. In: *Nazca Plate: Crustal Formation and Andean Convergence*. L. D. Kulm, J. Dymond, E. J. Dasch and D. M. Hussong, eds., *Geological Soc. America Memoir* 154. pp. 703-726.
- Ness, G. E., O. Sanchez-Zamora, R. Couch and R. S. Yeats. 1981. Bathymetry and oceanic crustal ages in the vicinity of the mouth of the Gulf of California, illustrated using Deep Sea Drilling Project Leg 63 underway geophysical profiles. In: *Yeats, R. S., B. Haq, et al., Initial Reports DSDP, 63, Washington (U.S. Govt. Printing Office)*, 919-923.
- Connard, G., R. Couch and M. Gemperle. 1983. Analysis of aeromagnetic measurements from the Cascade Range in central Oregon. *Geophysics* 48:376-390.
- Blakely, R. J., R. C. Jachens, R. W. Simpson and R. W. Couch. 1985. Tectonic setting of the southern Cascade Range as interpreted from its magnetic and gravity fields. *Geological Soc. America Bulletin* 96:43-48.

MICHAEL FEHLER

- Fehler, M. 1981. Changes in P-wave velocity during operation of a Hot Dry Rock geothermal system. *J. Geophysical Research* 86(B4):2925-2928.
- Aki, K., M. Fehler, et al. 1982. Interpretation of seismic data from hydraulic fracturing experiments at Fenton Hill, New Mexico, Hot Dry Rock Geothermal Site. *J. Geophysical Research* 87(B2):936-944.

- Fehler, M. 1982. Interaction of seismic waves with a viscous liquid layer. *Bulletin Seismological Soc. America* 72:55-72.
- Fehler, M. 1982. Using dual well seismic measurements to infer the mechanical properties of a Hot Dry Rock geothermal system. *J. Geophysical Research* 87(B7):5485-5494.
- Fehler, M. and B. Chouet. 1982. Operation of a digital seismic network on Mt. St. Helens volcano and observations of long period seismic events that originate under the volcano. *Geophysical Research Letters* 9:1017-1020.
- Pearson, C., M. Fehler and J. Albright. 1983. Changes in compressional and shear wave velocities and dynamic moduli during operation of a Hot Dry Rock Geothermal System. *J. Geophysical Research* 88(B4):3468-3475.
- Fehler, M. 1983. Observations of volcanic tremor at Mount St. Helens Volcano. *J. Geophysical Research* 88(B4):3476-3485.
- Fehler, M. and C. Pearson. 1983. Cross-hole seismic surveys: Applications for studying subsurface fracture systems at a hot dry rock geothermal site. *Geophysics* 49:37-45.
- Fehler, M. 1985. Locations and spectral properties of earthquakes accompanying an eruption of Mount St. Helens. *J. Geophysical Research* 90(B14):12,729-12,740.

MICHAEL GEMPERLE

- Connard, G., R. Couch and M. Gemperle. 1983. Analysis of aeromagnetic measurements from the Cascade Range in central Oregon. *Geophysics* 48:376-390.

RANDALL JACOBSON

- Jacobson, R. S., G. G. Shor, Jr., and M. Bee. 1984. A comparison of velocity and attenuation between the Nicobar and Bengal Deep Sea Fans. *J. Geophysical Research* 89(B7):6181-6196.
- Jacobson, R. S. 1984. Underway geophysical measurements on USNS LYNCH in support of Leg 78B. In: R. Hyndman, M. Salisbury et al., Initial Reports DSDP, 78B, Washington (U.S. Govt. Printing Office), 675-685.
- Jacobson, R. S., R. Adair, and J. Orcutt. 1984. Preliminary seismic refraction results using a borehole seismometer at DSDP Hole 395A. In: R. Hyndman, M. Salisbury et al., Initial Reports DSDP, 78B, Washington (U.S. Govt. Printing Office), 783-792.
- Bee, M. and R. S. Jacobson. 1984. Linear inversion of body wave data Part III: Model Parameterization. *Geophysics* 49:2088-2093.
- Jacobson, R., W. Milne, H. C. Brooks, J. Zollweg and B. Brandsdottir. 1985. The 1984 landslide and earthquake activity on the Baker-Homestead highway near Halfway, Oregon. *Oregon Geology* 47:51-57.

ROBERT KARLIN

- Karlin, R. 1980. Sediment sources and clay mineral distributions off the Oregon Coast. *J. Sedimentary Petrology* 50:543-560.
- Karlin, R. and S. Levi. 1982. Preliminary paleomagnetic results of laminated sediments from DSDP hydraulic piston core Site 480, Guayamas Basin, Gulf of California. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64 Pt. 2, Washington (U.S. Govt. Printing Office), 1255-1258.

- Karlin, R. and S. Levi. 1982. Paleomagnetism of laminated sediments from the Guaymas Basin, Gulf of California--DSDP Site 479. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64 Pt. 2, Washington (U.S. Govt. Printing Office), 1259-1261.
- Karlin, R. and S. Levi. 1983. Diagenesis of magnetic minerals in Recent haemipelagic sediments. *Nature* 303:327-331.
- Karlin, R. and S. Levi. 1985. Geochemical and sedimentological control of the magnetic properties of hemipelagic sediments. *J. Geophysical Research* 90(B12):10,373-10,392.

SHAUL LEVI

- Levi, S. 1979. The additivity of partial thermal remanent magnetization in magnetite. *Geophysical J. Royal Astronomical Soc.* 59:205-218.
- Banerjee, S. K., S. Lund and S. Levi. 1979. Geomagnetic record in Minnesota lake sediments - Absence of Gothenburg and Erleau Excursions. *Geology* 7:588-591.
- Iceland Research Drilling Project, (edited by I. L. Gibson). 1979. Crust of oceanic affinity in Iceland. *Nature* 281:347-351.
- Levi, S., U. Bleil, B. M. Smith, P. A. Rigotti. 1979. Compilation of paleomagnetic and rock magnetic results of basalt samples from DSDP Legs 51, 52 and 53. In: Donnelly, T., J. Francheteau et al., editors, Initial Reports DSDP, 51-53, Washington (U.S. Govt. Printing Office), 1337-1350.
- Levi, S. 1979. Paleomagnetism and some magnetic properties of basalts from the Bermuda Triangle. In: Donnelly, T., J. Francheteau et al., editors, Initial Reports DSDP, 51-53, Washington (U.S. Govt. Printing Office), 1363-1378.
- Ness, G., S. Levi, and R. Couch. 1980. Marine magnetic anomaly timescales for the Cenozoic and Late Cretaceous: A precis, critique and synthesis. *Reviews Geophysics and Space Physics* 18:753-770.
- Karlin, R. and S. Levi. 1982. Paleomagnetism of laminated sediments from the Guaymas Basin, Gulf of California--DSDP Site 479. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64 Pt. 2, Washington (U.S. Govt. Printing Office), 1259-1261.
- Karlin, R. and S. Levi. 1982. Preliminary paleomagnetic results of laminated sediments from the Guaymas Basin in the Gulf of California--DSDP Site 480. In: Curray, J., D. Moore et al., editors, Initial Reports DSDP, 64 Pt. 2, Washington (U.S. Govt. Printing Office), 1255-1258.
- Bleil, U., J. M. Hall, H. P. Johnson, S. Levi, and G. Schönharting. 1982. The natural magnetization of a 3-kilometer section of Icelandic crust. *J. Geophysical Research* 87(B8):6569-6589.
- Furuta, T. and S. Levi. 1983. Basement paleomagnetism of Hole 504B. In: Cann, J., Langseth, M. et al., editors, Initial Reports DSDP, 69, Washington (U.S. Govt. Printing Office), 697-703.
- Levi, S. 1983. Paleomagnetism and rock magnetism of submarine basalts from the Galapagos spreading center near 86°W. In: Honnorez, J., R. Von Herzen et al., editors, Initial Reports DSDP, 70, Washington (U.S. Govt. Printing Office), 429-435.
- Karlin, R. and S. Levi. 1983. Diagenesis of magnetic minerals in Recent haemipelagic sediments. *Nature* 303:327-330.
- Heath, G. R., D. H. Rea and S. Levi. 1985. Paleomagnetism and accumulation rates of sediments at sites 576 and 578, DSDP Leg 86, western North Pacific. In: Heath, G. R., L. H. Burckle, et al., editors, Initial Reports DSDP 86:459-502.

Karlin, R. and S. Levi. 1985. Geochemical and sedimentological control of magnetic properties of hemipelagic sediments. J. Geophysical Research 90(B12):10,373-10,392.

WILLIAM MENKE

- Menke, W. 1983. A formula for the apparent attenuation of acoustic waves in randomly layered media. Geophysical J. Royal Astronomical Soc. 75:541-544.
- Menke, W. 1983. On the effect of P-S coupling on the apparent attenuation of elastic waves in randomly layered media. Geophysical Research Letters 10:1145-1147.
- Abott, D. H., W. H. Menke, and R. Morin, 1983. Constraints upon water advection in sediments of the Mariana Trough. J. Geophysical Research 88(B2):1075-1093.
- Menke, W. 1984. The resolving power of cross-borehole tomography. Geophysical Research Letters 11:105-108.
- Abbott, D. H., W. Menke, M. Hobart, R. Anderson and R. W. Embley. 1984. Correlated sediment thickness, temperature gradient and excess pore pressure in a marine fault block basin. Geophysical Research Letters 11:485-488.
- Menke, W. 1984. Asymtotic formulas for the apparent Q of weakly scattering three-dimensional media. Bulletin Seismological Soc. America 74:1079-1081.
- Menke, W. 1984. Geophysical Data Analysis: Discrete Inverse Theory. 260 p. Academic Press, Inc., New York.
- Menke, W. 1984. Sieve analysis as tomography. J. Sedimentary Petrology 54:1358-1364.
- Menke, W. and R. Chen. 1984. Numerical studies of the coda falloff rate of multiply scattered waves in randomly layered media. Bulletin Seismological Soc. America 74:1605-1621.
- Menke, W. 1985. Imaging fault slip using teleseismic waveforms: analysis of a typical incomplete tomography problem. Geophysical J. Royal Astronomical Soc. 81:197-204.
- Menke, W., D. Witte and R. Chen. 1985. Laboratory test of apparent attenuation formulas. Bulletin Seismological Society of America 75:1383-1393.
- Menke, W. and B. Dubendorff. 1985. Discriminating intrinsic and apparent attenuation in layered rock. Geophysical Research Letters 12:721-724.

GORDON NESS

- Ness, G., S. Levi and R. Couch. 1980. Marine magnetic anomaly timescales for the Cenozoic and Late Cretaceous - A precis, critique and synthesis. Reviews of Geophysics and Space Physics. 18:753-770.
- Johnson, S. and G. Ness. 1981. Shallow structures of the Peru Margin 12°S - 18°S. In: Nazca Plate, Crustal Formation and Andean Convergence, L. D. Kulm, J. Dymond, J. Dasch and D. M. Hussong, editors. Geological Society of America Memoir 154. pp. 525-544.
- Ness, G., O. Sanchez-Zamorra, R. Couch and R. Yeats. 1981. Bathymetry and oceanic crustal ages in the vicinity of the mouth of the Gulf of California illustrated using DSDP Leg 63 underway geophysical profiles. In: Yeats, R., B. Haq et al., editors, Initial Reports DSDP, 63, Washington (U.S. Govt. Printing Office), 919-923.

- Ness, G. E. 1983. Comment on Oligocene calibration of the magnetic polarity time scale. *Geology* 11:429-430.
- Rea, D. K., G. E. Ness and G. R. Heath. 1985. Hemipelagic sedimentation in a region of crustal doming between the Mendocino and Pioneer fracture zones. *Marine Geology* 62:69-84.

II. RESEARCH ASSISTANTS AND STUDENTS

MICHEL BÉE

- Jacobson, R. S., G. G. Shor, Jr., and M. Bée. 1984. A comparison of velocity and attenuation between the Nicobar and Bengal Deep Sea Fans. *J. Geophysical Research* 89(B7):6181-6196.
- Bée, M. and R. S. Jacobson. 1984. Linear inversion of body wave data Part III: Model Parameterization. *Geophysics* 49:2088-2093.
- Bée, M., S. H. Johnson and E. F. Chiburis. 1984. Marine seismic refraction study between Cape Simpson and Prudhoe Bay, Alaska. *J. Geophysical Research* 89(B8):6941-6960.

DAVID BRAMAN

- Couch, R. and D. Braman. 1979. Geology of the continental margin near Florence, Oregon. *Oregon Geology* 41:171-179.

BRYNDIS BRANDSDOTTIR

- Jacobson, R., W. Milne, H. C. Brooks, J. Zollweg and B. Brandsdottir. 1985. The 1984 landslide and earthquake activity on the Baker-Homestead highway near Halfway, Oregon. *Oregon Geology* 47:51-57.

ROLIN CHEN

- Menke, W. and R. Chen. 1984. Numerical studies of the coda falloff rate of multiple scattered waves in randomly layered media. *Bulletin Seismological Soc. America* 74:1605-1621.
- Menke, W. and R. Chen. 1985. Laboratory test of apparent attenuation formulas. *Bulletin Seismological Society of America* 75:1383-1393.

GERALD CONNARD

- Connard, G., R. Couch and M. Gemperle. 1983. Analysis of aeromagnetic measurements from the Cascade Range in central Oregon. *Geophysics* 48:376-390.

BRUCE DUBENDORFF

- Menke, W. and B. Dubendorff. 1985. Discriminating intrinsic and apparent attenuation in layered rock. *Geophysical Research Letters* 12:721-724.

OSVALDO SANCHEZ-ZAMORA

Ness, G. E., O. Sanchez-Zamora, R. Couch and R. S. Yeats. 1981. Bathymetry and oceanic crustal ages in the vicinity of the mouth of the Gulf of California, illustrated using Deep Sea Drilling Project Leg 63 underway geophysical profiles. In: Yeats, R., B. Haq et al., editors, Initial Report DSDP, 63, Washington, (U.S. Govt. Printing Office), 919-923.

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5	61-3	Wyatt, B. N. Kujala	Physical oceanography data offshore from Newport and Astoria, Oregon, July 1959 to June 1960.	17 p.
6	61-4	Kujala, N. B. Wyatt	Surface temperature and salinity observations at shore stations on the Oregon coast.	23 p.
7	62-6	Wyatt, B. N. Kujala	Hydrographic data from Oregon coastal waters, June 1960 through May 1961.	77 p.
8	62-11	Oliphant, M. B. Wyatt N. Kujala	Surface temperature and salinity observations at shore stations on the Oregon coast for 1961.	16 p.
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21	65-20	Wyatt, B. R. Still C. Haag	Surface temperature and salinity observations at Pacific Northwest shore stations for 1963 and 1964.	18 p.
22	65-5	Skorpen, A. J. Gallagher P. Dehlinger	OSU Seismological Bulletin #7, January 1 to March 31, 1965.	15 p.
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41	69-14	Barstow, D. W. Gilbert B. Wyatt	Surface temperature and salinity observations at Pacific Northwest shore stations during 1969.	21 p.

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88	81-8	Bottero, J. H. Bryden D. Root J. Simpkins	A compilation of observations from moored current meters, Vol. XIII: Currents temperature and pressure southeast of New Zealand, April 1978 - May 1980. 161 p.
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- 78-1 Knapp, B. Reference number and Thesis Listings for 1977. 8 p.
- 78-5 Cohen, Y.
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